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UNIFICATION OF THE LAWS OF THE STATES RELATING TO THE COMMITMENT OF THE INSANE.*

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In a former report to the Conference by a committee of which the writer was chairman, the subject of the commitment and detention of the insane was considered at length in its general aspects. The present report will be devoted to a consideration of the various methods of commitment in the several States, the subject of detention being deferred, with a view to secure practical uniformity in the method of procedure. Widely as the present methods apparently differ in forms and requirements, there are still certain elements of uniformity which, when properly understood and harmonized, would seem to be susceptible of establishing a basis for a common formula applicable to each State, and thus to all of the States.

The question as to the importance of uniformity in the process of commitment may be raised at the outset. It might perhaps be a sufficient answer to this question to reply that there is now a recognized necessity on the part of legislators and jurists for uniformity of laws of the States on very many subjects. So much importance is attached to this reform that many associations, and even legislatures, are endeavoring to secure this result. It must be conceded that so far as laws are uniform in the States legal processes under them are simplified. In the case of the commitment of the insane uniformity of procedure would

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render a recommitment unnecessary when the patient passed from one State into another. There are many business relations of the insane which would not be affected by a change of State residence if uniformity existed. But perhaps the most important consideration which should have influence with this Conference, is the fact that the methods of commitment in many States, now so defective, and so devoid of accuracy, and, in some instances, of humanity, would be greatly improved and brought more in harmony with the present state of knowledge of the insane and their proper care. Another and scarcely less important fact is found in the formation of new States and the legislation which they are to create for the insane. Here is a virgin soil in which to plant true principles of government and to establish wise legislation. Hence it becomes the duty of this representative body to adopt and promulgate the most liberal and enlightened views in regard to the obligations of the State to this class of dependents in order that new States may not err in the creation of a system of laws relating to the insane. We can, therefore, but regard an effort to secure uniformity in the laws relating to the commitment of the insane as a subject worthy of the attention, if not of the hearty coöperation, of this Conference.

Legislation for the insane in this country shows a gradual advance of public opinion towards a higher and better conception of the nature of insanity and of the wants of the insane. This fact is made evident by a review of the various methods employed from time to time, during the century of the existence of the Republic, in the commitment and detention of the insane.

The first methods of taking care of the insane in the colonies were very naturally derived from England. It was not until 1744 that the mother country provided by statute for the special arrest and custody of the insane. In that year we find among the vagrant laws of England "An Act for apprehending and punishing of disorderly persons." It reads as follows:

"*Whereas*, There are sometimes persons who, by lunacy or otherwise, are furiously mad, or are so far disordered in their senses that they may be dangerous to be permitted to go abroad; therefore, be it enacted that it shall and may be lawful for any two or more justices of the peace to cause to be apprehended and kept safely locked up in some secure place, and, if such justices

shall find it necessary, to be there chained, if the last place of legal settlement be in such city, or in any town within such county."

This short but expressive Act stands as the embodiment of the highest and best sentiment of the people of England regarding the insane at that date. It was the popular opinion that only those insane who were "furiously mad," or so far "disordered in their senses" as to be "dangerous to be permitted to go abroad," needed public care; and these poor wretches were to be taken into custody, not to benefit them by the ministrations of benevolence and humanity, but to protect society from their acts of violence. The quality and the grade of care which they were to receive were well defined in the Act, viz., they were to be "kept safely locked up in some secure place," and if their custodians found it necessary, they were directed to have them chained there. That this law was rigidly enforced the current history of the times affords abundant evidence. The insane in public care were found in every jail, despised even by the criminals with whom they associated, and in the vast majority of cases they were chained. Their treatment was of the most cruel and barbarous character.

The colonies early adopted the practice of the mother country, and in the early statutes of some of them, notably of New York, this vagrant Act is found precisely as it passed the English Parliament. This Act may be regarded as the basis of our laws relating to the commitment and detention of the insane. The various forms which we find in the different States are essentially but departures from the organic law.

As a basis for discussion it will be necessary to collate and compare the various methods of procedure now or recently employed in committing the insane in the different States. For convenience Harrison's work, entitled "A Collection of the Lunacy Laws of the United States," is selected. This collection was made in 1884. Although changes in these laws have been made during the intervening eight years in several States, still those changes have not been of so radical a nature as in any respect to impair the general classification of methods then and now existing.

While, therefore, the exact method of procedure in each state may not, at the present time, be in accordance with that given

in this paper, yet the existing method in any State will fall under one or another of the heads into which these methods are classified. This collection, therefore, answers our object of presenting a classified arrangement of the methods of commitment of the insane now in operation.

An interesting historical feature in this review is noticeable. The present methods of committing the insane in the United States illustrate, when classified, the progress which has been made during the century towards a better management of the insane. In some states we find the method of commitment still closely resembling that followed at the commencement of the century. From this rude procedure we trace in the different States more and more rational methods which have a true historical sequence, illustrating the evolution of popular knowledge of the insane. The highest point of development reached is in those States which commit their insane wholly to the care and treatment of medical men.

1. *Commitment on the Decision of Justices of the Peace.*

It is an interesting fact that in five States, two being of the original thirteen States (three, if we include West Virginia,) we still find the justices of the peace, as a century ago, empowered to commit the insane to custody. These States are Virginia, North Carolina, West Virginia, Tennessee and Indiana.

In Virginia the justice acts on his own suspicion, and the testimony of a physician is a matter of accident. The statute provides that any justice who suspects any person to be insane shall order such person to be brought before him and two other justices, who together shall inquire as to his insanity. His physician (if any) and any other witnesses are summoned. The justices propound a series of prescribed questions, and finally decide as to insanity and order commitment. The proceedings are transmitted with the order. On admission to the asylum the board of directors is assembled, and if they concur in opinion with the justices the patient is received and registered; if not, the patient is confined in the jail.

The proceedings in West Virginia differ slightly from those of Virginia. In that State any justice who suspects any person insane shall require such person to be brought before him, and shall summon a physician and any other witnesses. The justice propounds a series of prescribed questions. The justice decides as to insanity, and commits or not, as he pleases. The proceedings are sent with the order. On admission to the asylum an examining board is assembled; if it concur in opinion with the justice as to his insanity, the patient is received and registered; if not, the patient is discharged.

In North Carolina the medical testimony is emphasized. Some respectable citizen makes before and files with a justice of the peace an affidavit in writ-

ing: the justice requires the patient to be brought before him, and one or more justices; they must take the testimony of at least one respectable physician, who, with such other competent witness as the justice may determine, subscribes under oath to a series of questions. Two justices must decide as to insanity and commit because patient is dangerous.

In Tennessee, in the case of public patients, one of the informants must be a physician. Some respectable citizen files with a justice of the peace a statement which can be proved by at least two persons, one of whom must be a respectable physician The justice takes the testimony of these persons and such others as he may think proper, at a time appointed, but the patient is not necessarily present. The justice decides as to insanity, and commits as dangerous. The proceedings are filed with the clerk of the county court, and a copy is sent to the asylum. The clerk issues his warrant to a suitable person to convey the patient to the hospital.

In Indiana a respectable citizen makes a statement in writing under oath before a justice of the peace. This statement is in blank form and consists of answers to twenty-two questions. The justice, with another justice, and a respectable practicing physician, not the medical attendant of the patient, selected by the first justice, visit and examine the alleged insane person. The justice then orders the clerk of the circuit court to subpœna as witnesses the persons named in the statement (question 21 requires the informant to name the persons by whom his statements can be proven): the medical attendant; the party making the allegation of insanity; the selected medical examiner, and such other persons as the justice may choose, including witnesses in behalf of the person alleged to be insane. The trial is at the court house. The medical attendant is required to make an affidavit on a blank form containing a full and careful statement of the medical history and treatment observed by him in the case. The medical examiner makes an affidavit that he is not and has not been recently the medical attendant of the patient; that within a week he carefully and personally examined him, and also the statement alleging insanity; that he heard all the testimony given in the inquest; finally he formulates his opinion, giving the facts on which it is based. The justices decide as to insanity and make a statement of their judgment in a prescribed form. The commitment is for insanity and its dangerous character. The statement, certificate and judgment are filed with the clerk of the circuit court, who applies to the Indiana Hospital for the Insane for the admission of the patient.

From the preceding sketch of the methods of procedure it will be seen that the essential features of the old Vagrant Act are still maintained in these five States. The most important departure is in the medical element in the testimony required by statute, the only part of the proceeding which gives it any scientific accuracy. The law of Virginia more nearly conforms to the terms of the Vagrant Act, as a physician is required to give testimony only in case there was one in attendance upon the alleged insane person. But an important provision is added,

which to a certain extent supplements this defect in the proceedings. This provision requires that the board of directors of the asylum assemble and examine the patient, and they have power to refuse admission if they do not concur in opinion with the justices. The law of West Virginia is an improvement, for the justices must summon a physician as a witness, and when the patient enters an asylum an examining board meets and examines him. Such a board presumably consists in part of medical men. The law of Tennessee is more enlightened still, for it requires that one of the informants must be a physician, and he must appear as a witness. The highest grade of improvement of the old Vagrant Act is reached in Indiana. Here the justices associate with themselves a respectable practicing physician and require the testimony of the medical attendant, but at the close of the proceedings the justices and not the associated physician decide as to insanity.

This method of commitment, with all its improvements upon the original English Act, is in every respect inadequate and incompetent. On a justice of the peace, an inferior civil officer, is imposed the responsible duty of determining one of the most difficult questions in medical science. On his uninformed judgment rests the future well being of the sick man who is brought into his court.

2. *Commitment on the Decision of a Judge.*

Commitment on the trial of the insane by a judge, and on his decision as to the person's insanity, is the practice in eighteen States and two Territories, viz., Louisiana, Florida, Rhode Island, Wisconsin, Oregon, Washington, Nevada, Michigan, Idaho, South Carolina, Missouri, New Jersey, California, Alabama, Arkansas, Ohio, Montana, Massachusetts, and the Territories of Utah and Arizona.

In Louisiana any person may petition, under oath, the district or parish judge who issues a warrant to bring the patient before him in Chambers. No physician is required to testify or examine the case. The judge decides as to insanity, and in committing issues a warrant to the sheriff commanding him to convey the patient to the asylum.

In Florida the suggestion is made by petition or otherwise to a judge of the Circuit Court. The judge issues a writ to the sheriff directing him to bring the person before the judge, for the purpose of inquiring as to insanity. No physicians or other witnesses are specified as necessary to the inquiry. The judge decides as to insanity and directs and orders the sheriff to transport the patient to the asylum.

In Rhode Island a complaint is made in writing, under oath, to any trial justice, or clerk of a Justice Court, that an insane person at large is dangerous, such justice or clerk must require the sheriff, deputy, town sergeants or constables to bring him before such or some other justice for examination. No medical testimony is required. Justice decides as to insanity, and commits for custody.

In Wisconsin any respectable citizen makes application in writing to a judge of the County Court, or a Court of Record, and specifies whether or not a trial by jury is desired by the applicant. The judge appoints two disinterested physicians, of good repute for medical skill and moral integrity, to visit and examine the patient at his residence. The report of the physicians is embodied in a series of twenty-seven prescribed questions. The judge decides as to insanity. If a jury is called for the trial, it is the same as by jury in justices' courts, but all persons are excluded except witnesses. The verdict of the jury decides as to insanity. The proceedings are sent with the order to the asylum.

In Oregon any two householders make application under oath to a county judge, who shall cause the person to be brought before him at such time and place as he directs. Two or more competent physicians are required who, after careful examination, must certify under oath as to his insanity. There must be an attorney present to represent the state. The judge decides as to insanity, and commits. An appeal lies from the decision of the judge. All the proceedings are filed with the county clerk.

In Washington, on an application under oath to a judge of Probate, he causes the person to be brought before him, and at the same time and place causes to appear one or more respectable physicians who must state under oath or in writing their opinion of the case. The judge decides as to insanity and commits or not, as he pleases. The patient, or any person, may demand a jury.

In Nevada, any person under oath may inform a district judge, who shall cause the patient to be brought before him at such time and place as he shall direct; he shall also cause to appear at the same time and place one or more practicing physicians, who shall, after careful examination of the person alleged to be insane, certify upon oath as to his insanity, and that he is dangerous at large. The judge decides, and causes him to be sent to the asylum if unsafe.

In Utah application under oath is made to a Probate judge that the patient is dangerous to be at large, who, thereupon, causes him to be brought before him, and summons at the same time two or more witnesses who "well knew the accused," and shall also cause to appear at the same time and place two or more practicing physicians. After careful hearing of the case, and a personal examination of the person alleged to be insane, the physicians must certify, on oath, as to insanity, whether recent or curable, and whether patient is dangerous. The judge decides as to insanity, directs the sheriff or some suitable person to convey him to the asylum. The judge transmits a copy of papers to the asylum.

In Michigan, in case of pauper insane, superintendents of the poor or any supervisor, and for indigent insane, any person makes application to the Pro-

bate judge, who begins the inquiry by summoning winesses, one or more of whom must be a respectable physician for a pauper, but two are required for an indigent. The judge decides as to insanity and makes a certificate and order for commitment. No personal examination required.

In Idaho any person alleged to be indigent and insane must be brought before a Court of Record, or judge thereof. Examination shall be public, and at least one physician, a graduate in medicine, must testify; judge decides as to insanity and makes an order on the county commissioners, who provide transportation.

In South Carolina a judge of Probate, or of the Circuit Court, may order a trial justice to inquire as to the insanity of any person. And when information on oath is given to a trial justice it is his duty to call to his assistance two licensed practicing physicians and examine such person. The physicians shall certify to the judge, or to the Board of County Commissioners, the results of their examination whether the person is incurable or dangerous. The judge or the board decides as to insanity and commits by an order.

In Missouri, in the case of paupers, a citizen files with the clerk of the county court a statement as to the insanity of the person, naming as witnesses at least two persons, one of whom shall be a respectable physician. The clerk summons the persons named as witnesses and other persons to appear on the first day of the first session of the court thereafter. The court causes the witnesses to be examined before themselves as a jury. At least one of the witnesses examined shall be a respectable physician. The court or jury decides as to insanity and commits for treatment. Pay patients are committed on the certificate of two physicians.

In New Jersey, in the case of paupers, the overseer of the poor applies to a judge of the Court of Common Pleas. The judge calls one respectable physician and fully investigates the case. The judge decides as to insanity and commits because the disease is of such a nature that it may be cured, and issues his order to the overseer.

In California affidavit is made before a magistrate, who issues a warrant for patient's arrest, and that he be brought before a judge of a Court of Record. The judge summons two or more witnesses, best acquainted with the patient, to testify, and at least two graduates of medicine must hear their testimony, examine the patient, and certify on prepared blanks to insanity and its dangerous character. The judge decides as to the insanity and commits because patient is dangerous to health, person or property.

In Alabama friends, or any other person, inform the Probate judge. He calls one respectable physician and other credible witnesses, and fully investigates the facts, with or without a jury, at his discretion, and decides as to sanity and indigence. If he decide the patient insane he certifies to the fact, and forwards his own and the physician's certificate with the patient to the asylum to be filled. The cause of commitment is insanity.

In Arizona any person under oath may inform the Probate judge. He causes the patient, if at large, to be brought before him, and summons two or more witnesses, then acquainted with the "accused," to appear and be examined under oath. He also must cause one or more graduates of medicine

and reputable practitioners thereof, to be present, who, upon the hearing of the facts "and a personal examination of the accused," shall make a written statement as to the existence of insanity, its permanency, and the dangerous character. The judge decides as to the insanity and commits if the patient is dangerous.

In Arkansas any reputable citizen may file a written statement with a County and Probate judge. He appoints a hearing for such competent witnesses as may be produced, and causes the patient to be examined by one or more regular practicing physicians of good standing, who must present in writing a sworn statement of the result of their examination, including twenty-six printed interrogatories. The judge decides as to the insanity, and commits for "care and treatment as his being at large is dangerous to the community or prejudicial to his chances of recovery."

In Ohio a citizen files an affidavit with the probate judge, who appoints a day for the inquest not more than five days after the affidavit; the patient must be present unless the judge decides otherwise, in which case the judge must personally visit him and so certify. One witness must be a respectable physician, who shall answer and certify to a series of questions. The judge decides as to insanity and directs the sheriff to convey the patient to the asylum.

In Montana the probate judge takes the oath of two reputable physicians, and examines the person himself, or causes him to be examined by an impartial person. The judge decides as to insanity and makes an order of commitment. Husband or wife, or relative to the third degree may demand a jury.

In Massachusetts a judge of the supreme, judicial, or superior court in any county, and a judge of the probate, police, district or municipal court may commit. The judge shall see and examine the patient, or state in his final order why he did not do so. The judge appoints a place of hearing. No commitment is legal unless there has been filed with the judge a certificate signed by two physicians, graduates of a legally organized medical college and who have practiced three years in the State and are not connected with any hospital or other establishment for the treatment of the insane. Each must personally examine the patient within five days of signing the certificates, and each shall certify that he is insane and a proper subject for treatment in an insane hospital, giving the facts on which the opinion is based. The judge decides as to insanity and commits for treatment.

The commitment of the insane on the decision of a judge after trial differs from the method of commitment by a justice of the peace only in the character of the presiding officer. The selection of a judge of probate or of a county, circuit or supreme court, to conduct the proceedings for commitment, instead of an ordinary justice of the peace, marks an advance of public opinion in the direction of giving more character and more precision to the process. In its most objectionable form the judge is not required to take medical testimony as in Florida, Louisiana and

Rhode Island. The patient is summarily arrested by the sheriff, brought into court and tried by the judge, like an ordinary offender. The examination of the patient by competent medical men, and their sworn opinion as to the existence of insanity, is required in most of the States having this method. In addition to this requirement in Montana, the judge must examine the patient himself or cause his examination to be made by an impartial person, not necessarily a physician. In Ohio the patient must be present at the trial, or if he is not, the judge must himself personally visit him. In Massachusetts the judge must personally visit the patient or state in his final order why he did not do so. These additional requirements are of no practical value. Neither a judge nor an impartial person could, on visiting the parties, determine the special nature of the disease, or the peculiar necessities of the case. They could only form an opinion of the general condition and surroundings of the sick person.

In South Carolina the proceeding is somewhat peculiar. A trial justice calls to his assistance two licensed practicing physicans. The physicians certify to the judge or to a board of county commissioners the results of their examination, and the judge, or the board, as the case may be, decide as to the disposition to be made of the patient. This method is only another phase of the proceedings in this division.

3. *Commitment on the Verdict of a Jury of Laymen.*

The States requiring a jury trial of the insane by a jury of laymen are Maryland, Mississippi, Colorado, Texas and Wyoming.

In Maryland the law provides that when any person is alleged to be an insane pauper the circuit court for the county, or if in Baltimore the criminal court, shall empanel a jury of twelve men to inquire as to the truth of the allegation. The jury decides as to insanity. No medical examination or testimony is required.

In Mississippi, when a citizen suggests in writing to the clerk of a chancery court that the friends or relations of any lunatic neglect or refuse to place him in an asylum, the clerk shall direct the sheriff to summon as soon as may be, the alleged lunatic and six discreet persons to make inquisition thereto on oath. A majority decides as to insanity, and the clerk orders the patient arrested and placed in asylum. No medical examination or testimony required.

In Colorado, a reputable person files a complaint duly verified with the county clerk, who issues an order to any sheriff or constable of the county for the apprehension of such alleged insane person. When arrested, he is

taken forthwith before the county court, or the judge thereof. He may elect to have the inquest at once, otherwise ten days' notice must be given, he being confined meantime in the county jail, or other convenient place. At the trial a jury of six men is empaneled. No medical testimony is required. Jury decides as to insanity and its dangerous character, and judge commits, on ground of danger to himself or others, or to property, to county jail, until otherwise disposed of according to law.

In Texas pauper or public patients are committed as follows: Information in writing, under oath, must be given to a county judge, who causes the patient's arrest by the sheriff or constable, summons a jury of six competent jurors; the State is made the plaintiff and the patient the defendant; the county attorney represents the State, and the patient has counsel. Medical testimony is not required. The jury decides as to insanity. If he is found to be insane, a judgment is entered, "adjudging the defendant to be a lunatic, and ordering him to be conveyed to the lunatic asylum for restraint and treatment." Proceedings are entered on record in the probate minutes, and a copy sent to the superintendent of the asylum.

In Wyoming, the law provides that the information be given in writing by a citizen, or probate judge, or coroner, or constable, to a probate judge, who may cause the facts to be inquired into by a jury. The judge may, at his discretion, cause the patient to be brought before the court. No medical testimony required. The jury decide as to insanity.

The trial of the insane by a jury is still another phase of the old English Vagrant Law. It may be regarded as an effort to perfect that law by substituting for the judgment of a single incompetent person, as a justice of the peace or a judge, the verdict of six or more persons even more incompetent. The insane person was still treated as a common offender against the law, was arrested and confined with criminals, and as such placed on trial before a jury.

This method of procedure is essentially that adopted for minor criminals in police courts and has but one element that gives the patient any certainty of being dealt with judiciously. This is the requirement that he shall be examined by qualified physicians, and that their testimony shall form a necessary part of the procedure. There is no safeguard to the patient to prevent the proceeding from being one of a harsh and cruel nature. The physician has no voice in the proper care of the patient and he may be treated with all the rudeness which characterizes the arrest and trial of a common criminal. Many insane persons become the sport of officers and by-standers, owing to the peculiarities of their illusions, at a period in their sickness when they need quietude, sympathy, and seclusion from the public curiosity.

4. *Commitment on the Verdict of a Mixed Jury of Laymen and Physicians.*

Three States, viz., Illinois, Kansas and Minnesota, require that at least one physician shall be on the jury.

In Illinois a near relative or any respectable person petitions the county judge. Judge orders clerk of court to issue a writ to the sheriff or any constable, or the person having charge of the alleged insane person, requiring him to be brought before the judge at a time and place appointed. A jury of six persons, one a physician, is empaneled, and the case is tried in the presence of the person alleged to be insane, who may have counsel. No medical evidence is required. The jury render their verdict in writing in a prescribed form, the finding being insanity or not, and whether he is a proper subject to be sent to the State Hospital.

In Kansas information in writing is given to the judge of probate court. The judge fixes the time for trial, and empanels a jury of six persons, one of whom is a physician in regular practice and good standing. The judge may at his discretion, cause the patient to be brought into court, but the patient has the right to be present at the trial with counsel. The jury decide as to insanity and as to his being a fit person to be sent to the asylum; they must all sign the verdict. There must be attached to the verdict a brief statement of the medical treatment of the case, with other necessary information by the physician on the jury.

In Minnesota information is filed with the probate judge or the court commissioner, who causes the person to be examined by a jury consisting of two respectable persons, besides himself, one at least of whom shall be a physician. A majority of the jury decides as to insanity, and the judge issues duplicate warrants committing for care; one warrant is filed in the office of the judge and the other in the asylum.

The trial of the insane by a jury containing a medical man is another departure which, though not very radical, still shows the trend of public thought in the direction of a scientific and clearly rational method of treating the insane. We have in this fact, as in the compulsory attendance of medical witnesses, a recognition of the true status of the insane as sick persons, and the proper relation of the medical profession to their care. This method of jury trial reaches its highest development in the State of Minnesota, where the jury is reduced to three in number, one of whom is the judge, who conducts the proceedings, the second must be a physician, and the third may also be of that profession. A majority of the jury decides as to the issue of insanity. In such a court the medical judgment is likely to be paramount and conclusive in determining the nature of the prisoner's mental condition.

The whole proceeding, however, in any of the forms by which the insane are arrested and brought before juries for trial belongs to a past age, and is unworthy of this enlightened period.

5. *Commitment on Decision of the Chancellor of the State.*

The proceedings for the commitment of the insane in the State of Delaware are as follows:

Relatives or friends, with the certificate of two practicing physicians, apply to the Chancellor of the State personally or by petition, setting forth facts as to insanity and the necessity of a better and more efficient mode of medical treatment than can be afforded in the county almshouse of the State. The chancellor decides as to insanity, and recommends the governor to remove the patient to an almshouse.

This form of commitment reminds us of the English custom of regarding the insane as under the special jurisdiction of the Lord Chancellor. The same custom once prevailed in the State of New York. The method does not differ essentially from that form in which the certificate is submitted to a judge of a higher court.

6. *Commitment on Decision of a Commission Appointed by a Judge.*

In Rhode Island, Georgia, New Mexico and Connecticut the commitment of the pauper insane is on the decision of a commission appointed by a judge to whom application is made.

In Rhode Island, in certain cases, a justice of the Supreme Court appoints not less than three commissioners, who must be sworn by the justice before the inquisition. The patient must be notified of the time and place of hearing in order that he may have an opportunity by evidence, by his own statements, and by counsel to defend himself against the charge of the petition. No medical testimony is required. The judge decides as to insanity, and may commit to a curative hospital for the insane of good repute.

In Georgia, upon the petition under oath, the ordinary, upon proof that ten days' notice of such application has been given to the three nearest adult relatives of such person, if there are such relatives, issues a commission to any eighteen discreet and proper persons, one of whom shall be a physician, requiring any twelve of them, including the physician, to examine by inspection the person, and to hear and examine witnesses, and report the results to the ordinary. The ordinary commits if the commission report that the person is insane.

In Kentucky the State or county attorney makes application to some court of the county. The court (Circuit, Common Pleas, or Chancellor, County

Judge, or City or Public Court Judge) causes an inquest by a jury to be held in open court. The court appoints a lawyer to protect the interests and rights of the patient. The State Attorney is especially charged to be present at all inquests. A form of verdict is prescribed. The patient is to be present unless two physicians make affidavits that they have personally examined him and believed him to be insane, and that it would be unsafe to bring him into court. The judge decides as to insanity and makes an order of commitment. The presiding officer draws up a brief history of the patient, which he transmits with the record to the asylum.

In New Mexico a petition, with affidavit, by a relation by blood or marriage, or by a person interested in the estate, must be made to a district judge who issues a commission to one or more persons to inquire into the lunacy of the patient. The form is * * * "do hereby appoint, authorize and command you, or any two of you, that at such certain day and place as you shall think fit, you diligently inquire, by the oaths or affirmations of six or more good and lawful men, by whom the truth of the matter may be better known." No medical testimony is required. The court empowers the commission to issue writs of venue, subpœnas and habeas corpus, and to force obedience to the same.

In Connecticut, on a written complaint made to any judge of the superior court that a person not a pauper is insane and unfit to go at large, the judge shall immediately appoint a committee consisting of a physician and two other persons, one of whom shall be an attorney, judge or justice of peace. If, in their opinion, such person should be confined the judge shall issue an order therefor.

The process of commitment by this method is not unlike that by a jury. It is entirely destitute of that accuracy which should characterize such proceedings, and is liable to subject the patient and friends to injudicious and disturbing treatment.

7. *Commitment on Decision of Commissioners of Insanity.*

In three States commissioners of insanity are created in each county, who examine each case of alleged insanity, and determine the condition of such person.

In Iowa information under oath is made to the commissioners of insanity. There are three commissioners in each county; one is the clerk of the circuit court, and others are appointed by the judge of the circuit court, one of whom must be a respectable practicing physician, and the other a lawyer.) The commissioners may examine informant, and if satisfied that there is reasonable cause shall at once investigate the case. They may require the presence of the patient during the examination, or not, at their discretion; but in any case they must appoint a regular practicing physician to make a personal examination of the alleged insane person, to obtain answers to the prescribed series of questions from relatives or others, and to certify under his hand to his examination. The commissioners decide as to insanity, and whether the

patient is a fit subject for treatment and custody. The warrant for removal to the hospital is made to the sheriff. The patient has the right of appeal from the decision within ten days.

In Maine any relative or justice of the peace makes a complaint in writing to a board of examiners (the municipal officers of towns), who take testimony. The evidence and certificate of at least two respectable physicians, based upon due inquiry and personal examination, are required. The examiners decide as to insanity, and commit, if he is insane, because they think his comfort and safety and that of others will be promoted. Any person deeming himself aggrieved by the decision of the board may appeal within five days.

In Dakota written information under oath is filed with the commissioners of insanity, (thus a commission exists in each county and consists of the judge of probate, a respectable practicing physician, and a respectable attorney.) Commission investigates; patient present or not at discretion of commission; any citizen may appear for or against; commission appoints some regular practicing physician to make personal examination, and to obtain from relatives and others correct answers to certain prescribed questions. Commission decides as to insanity and whether patient is a fit subject for treatment and custody in the hospital. Sheriff or deputy, or other suitable person removes patient; but if a woman, another woman or relative must accompany her.

In Nebraska, information, verified by affidavit, must be filed with the commissioners, (a board of three members in each county styled "Commissioners of Insanity," one of whom is the clerk of the district court; the others are appointed by the judge of said court, one being a respectable practicing physician, and the other a respectable practicing lawyer.) The commissioners may have the patient present or not at the inquest; in any case they shall appoint some regular practicing physician, who may or may not be of their number, to make a personal examination, gather facts from relatives, and certify under his own hand as to the insanity and condition of the patient. The board decides as to insanity and commits for treatment and custody.

The method of determining the existence of insanity and of the commitment of the insane by a permanent commission, one of whom must be a respectable practicing physician, another must be a respectable practicing lawyer, while the third is a probate judge or the clerk of a court of record, is still another step in the progress of reform in the care of the insane. Its special merits consist in the high character of the members of the commission; the permanency of the commission, which insures a better qualification of the members; the method of conducting the proceedings, which relieves them of all disturbing conditions; and, finally, the power to determine the nature of the affection, and the proper care and treatment of the persons alleged to be insane.

The commission in Maine, which consists of the officers of the

municipality, is inferior to that of the other States, because the membership is by no means so select, and there may be no medical member.

An objection to this method is in its inconvenience, the commission often being remote from the patient.

8. *Commitment on Decision of an Asylum Board.*

In two States there is provision for the commitment of the insane on the decision of an asylum examining board, viz., Virginia and Mississippi.

In Virginia, on application for the admission of a person into an asylum, the examining board may receive him if unanimous in its action.

In Mississippi the superintendent and board of trustees of the asylum may, on application, admit "any person being a lunatic and a resident of the State," though no proceedings in lunacy have been taken.

It has long been held that it would be an unsafe proceeding to give the power of committing the insane to a party who was personally an officer of the asylum to which such insane person was to be admitted. Even the testimony of a physician is not allowed in England, nor in several States, in the case of an alleged insane person who is to be admitted to the asylum with which such medical examiner is connected. The purpose of such legislation is evidently to guard the person alleged to be insane from the possibility of being committed to an asylum unjustly by interested parties. Standing as an act of asylum managers, without any State supervision, or other responsibility to proper authorities, this method of commitment cannot be regarded as wise or judicious. It must, however, be considered as an advance in public sentiment, for there is an evident recognition of the necessity of a higher grade of examinations than that secured in courts of law.

9. *Commitment on the Decision of Physicians.*

In the States of New York, New Hampshire, Georgia, Texas, Connecticut, Vermont, Pennsylvania, Rhode Island, Tennessee, and in the District of Columbia, the insane are committed on the certificate of physicians.

In New York the sworn certificate of two physicians is required. They must be of reputable character, graduates of incorporated medical colleges, permanent residents of the State, in actual practice at least three years, and

not connected with the asylum to which the patient is committed. These qualifications must be certified to by a judge of a court of record. There must be a personal examination of the patient by the physicians, and the certificates must bear date of not more than ten days prior to commitment. They must finally be approved by a judge of a court of record, who may, at his discretion, institute further inquiry, or take proofs, or call a jury.

In New Hampshire two reputable physicians must certify to insanity after a personal examination within one week of commitment; such certificates must be accompanied by a certificate of a judge of the supreme court or court of probate, or mayor, or chairman of the selectmen, testifying to the genuineness of the signatures and the respectability of the signers. Judge of probate may commit any insane person who is dangerous. Overseers of the poor may commit any insane pauper.

In Georgia a pay patient is admitted to an asylum on the certificate of three respectable practicing physicians, well acquainted with the condition of the patient, or one from such physicians and two respectable citizens, stating the cause of application.

In Texas private patients are committed as follows: The legal guardian, near relative, or other person interested in the patient, must present to the superintendent of the asylum a sworn statement of facts relating to him, accompanied with the affidavit of the physician certifying that he made a careful examination of the patient and verily believes him to be insane, and with a certificate of the county judge that the physician certifying is a respectable person. The physician decides as to insanity, and the commitment follows.

In Connecticut a selectman applies to the judge of probate in behalf of pauper insane. The judge appoints a respectable physician, who shall fully investigate the facts of the case and report to the judge. If the physician is satisfied that the pauper is insane, the judge orders the selectman forthwith to take such insane pauper to the hospital.

In the District of Columbia two respectable physicians appear before a judge of the supreme court or justice of the peace and depose in writing under oath that they knew the patient, and from personal examination believed him to be insane and a fit subject for treatment in the Government Insane Hospital. The judge or justice makes a certificate, which with the affidavits of the physicians, is presented to the secretary of the interior, who grants an order admitting the patient to the hospital.

In Vermont, the certificate of two physicians certified by the judge of probate to be of unquestioned integrity and skill, not members of the same firm, nor officers of an insane asylum, is required. The certificate must be made not more than ten days previous to the admission of the patient to the asylum, and not more than five days after making a careful examination of the alleged insane person. The physicians decide as to insanity, and their certificate, certified by a judge of probate, commits to an asylum. The next friend may appeal from this decision to the supervisors (three persons elected by the general assembly, biennially, two of whom are physicians, their duties being the visitation of asylums,) who must forthwith examine the case and reject or indorse the certificate, according to evidence.

In Tennessee legal guardians, relatives or friends, or a justice of the peace

may place an insane person in an asylum, provided at least one reputable physician certifies within one month of admission under oath, before a justice of the peace or a judge of any court of record, who attests the same, that the person is proved to be insane upon personal examination. The physician decides as to insanity.

In Pennsylvania two physicians, residents of the State, who have been in the actual practice of medicine for at least five years and who are not related to the patient, shall certify that they have examined separately the patient and that the disease is of a character which requires that he be placed in a hospital or other establishment where the insane are detained for care and treatment, and that they are not related to the patient, nor connected with the institution to which he is to be committed. This certificate shall have been made within one week of the examination and within two weeks of the time of admission, and must be sworn to before a judge or magistrate of the county, who shall certify of the genuineness of the signatures and the good repute of the signers. The physicians decide as to insanity.

In Rhode Island parents, guardians, relatives or friends, and overseers of the poor when the patient is a pauper, may place insane persons in a curative hospital of good repute, on the certificates of two practicing physicians of good standing and known to be such by the superintendent of the hospital.

In the commitment of the insane on the decision of medical men alone we have the highest development of this proceeding yet placed on the statute book. The true nature of insanity is fully recognized, and the insane are removed from the category of criminals, and placed among that class of sick persons requiring only medical care and treatment. The courts perform only simple notarial functions, by certifying to the genuineness of the papers, or to the professional standing of the physicians. In New York there is still noticeable in the proceedings a relic of the ancient law. The judge approves or not the certificates, according to his discretion, though in this act he is believed to assume no other responsibility in the commitment than to certify to the proceedings. But he may institute farther investigations, and may even call a jury, and submit the person to the ordinary trial of a petty criminal. In that respect the law admits of great abuse. Practically, however, the commitment is on the decision of the examining physicians, the judge performing no other function than that of perfunctorily signing his name in approval.

A very important feature of the law of New York is that forbidding physicians from certifying to the insanity of any person unless they have been duly certified by a judge of a court of record to have graduated from an incorporated medical

college, to have been three years in actual practice, and to be of reputable character. This provision of law has secured to every part of the State a class of examiners in lunacy representing the best educated and most respectable class of practitioners.

The method of commitment on the decision of physicians reaches its highest development in the States of Pennsylvania and Rhode Island. In the former State the certificate of insanity of the physicians is conclusive, the judge merely certifying to the genuineness of the signatures and the character of the signers. In the latter State even this formality is dispensed with in a certain class of cases, and the only requirement is that the superintendent of the hospital shall know of the good standing of the certifying physicians.

It is apparent from this review that there has been a slow but progressive change of public opinion, during the century of the existence of the United States as an independent nationality, in favor of a more correct and rational treatment of the insane. As the century advanced far more thought was given to insanity by competent medical investigators. A better knowledge of pathology revealed more and more clearly the important fact that insanity, under all conditions and circumstances, is a disease, and in every possible phase which it may assume it must be relegated to the domain of medical science; that it must be studied as a disease of an acute or chronic character, and in every stage requires the most skillful medical care and treatment; that the obscurity connected with its pathology and its manifestations emphasizes the necessity of subordinating its management more completely to the highest grade of medical investigation and treatment; that all future progress in unfolding the mysterious operations of the mind in health and disease, and their relations to the varying conditions of nerve structure, and of nerve structure to the organs of the body, must be along the line of more accurate knowledge of the minute anatomy and the physiological functions of the brain, and more exhaustive clinical observation and research; and finally that to accomplish these results the insane must be brought under the direct and absolute control of the highest available medical talent, for the purposes not only of care and treatment, but of study and investigation. And these conclusions are now recognized by every student of mental physiology and pathology, and should be

accepted by the State as a basis of all judicious and rational laws relating to the management of the insane. It is through the failure of legislative bodies to realize this fundamental principle that the insane are sick people and nothing more, that we have the multitude of incongruous laws relating to their care. But it is gratifying to notice in the preceding review that, while in the great majority of the States we trace the recognition of this principle more or less distinctly, in several States it has been fully adopted and forms the basis of all legislation affecting the insane.

We may conclude that the common ground for legislation for the insane in all of the States will be found in the recognition of the fact that in whatever State the insane are and whatever may be the form, grade, or stage of progress of the affection, they are the victims of a disease pure and simple. With the adoption of this opinion as a principle, the question of curative care and treatment would first be considered in every case, and would determine the destination of each individual insane person.

Indeed, the first step in the process of commitment in all of the States is the determination of the existence of insanity and the kind of care and treatment required. There can be no difference of opinion as to the competency of the witnesses who are to determine the status or condition of the individual. Is he or is he not insane? If insane what form of insanity is it? In what stage of progress is the disease? What are the chances of recovery? What kind of care and treatment does this person require for his recovery or comfort? This group of questions can only be answered intelligently by a medical man. It is true that the merest child might correctly decide that a person is insane, as he might that he has fever, but the establishment of that fact alone should not determine the necessity of his being placed in confinement. The case must be thoroughly studied as a whole by competent physicians before an intelligent judgment can be formed as to the care and treatment which he requires.

Another and not less cogent argument in favor of imposing upon the medical profession the entire duty and responsibility of committing the insane, is found in their special qualifications for instituting and prosecuting all the necessary inquiries with the least possible disturbance of the patient. The inquiry on

the part of the physicians necessary to a correct opinion, involves the taking of all the available and reliable testimony bearing on the history of the alleged insane person, his habits, conduct, &c. Practically the medical examiners now always cover the entire case in their search for facts on which to base their own conclusions. If, then, two or more such officials are called to investigate the condition of a person afflicted with the disease insanity, and are empowered and required to personally examine such person, and to collect and record as the basis of their opinion all the facts relating to his sickness and necessities as regards care and treatment, can there be any possible need, in the interests of such insane person, of any additional official inquiry? We believe not. Every one who has been much among the insane has been impressed with the sense of injustice which they feel towards every one who has any part in their commitment. This feeling is increased in proportion to the publicity which is given to it. To them the whole proceeding has the character of a conspiracy, and hence the larger the number engaged in it the more aggravated and irritated they become.

Again, it is the universal experience of alienists that the chance of recovery from insanity is in inverse ratio to the length of time which the disease has continued. Hence the necessity of early treatment. It follows therefore that those methods of securing commitment which present the fewest obstacles, with proper security of the rights of individuals, are the best. The Earl of Shaftesbury, in his evidence before the Royal Commission, regarded early treatment as so important that he deprecated any formalities in the process of commitment which were likely to make friends delay, such as too great publicity. Equally important is it that, as far as possible, the insane should not in this act be subjected to treatment which in any manner disturb them, or aggravate conditions on which their insanity depends. While, therefore, the proceedings would be conducted by physicians so quietly as not to expose the insane to unnecessary irritation and excitement, the successive steps may be taken under proper statutory regulations with that precision which would secure a right judgment and assure the friends and the public that sane persons cannot, designedly or by mistake, be committed as insane. We can but conclude that the highest and best interests of the insane will be consulted if the entire investi-

gation as to their condition and needs preliminary to commitment be by statute imposed upon the medical examiners above provided.

This is amply proved in those States which have adopted this method. The medical examiner is summoned to the alleged insane person in the same manner as to any other patient. The second examiner is called in consultation, as in any ordinary case in medical practice, or each visits the person separately from the other, if the law requires separate examinations. Neither patient nor friends are disturbed by these examinations, nor is there that publicity from which families instinctively shrink. The allegation that such privacy is liable to tempt interested parties to secure the commitment of sane persons to asylums is absurd and has not the slighest foundation in fact.

In attempting now to formulate a law for the commitment of the insane which may be adopted by all of the States, we shall advance no new and untried scheme, but shall deduce it from the laws already existing in the several States. In these laws, and in the principles drawn therefrom, we find all of the elements necessary for the construction of a code of procedure, which if not fully up to the standard which science and humanity would require, is certainly a vast improvement upon that in practice in the great majority of the States. Our task is, therefore, rather that of constructing a new method out of existing methods, than of creating it from new materials.

The first section of the proposed law should declare the fact that no person shall be admitted to, or detained in, an institution for the care and custody of the insane, except on the certificate of a qualified physician, or physicians. The English law requires the certificate of two physicians, and several States have followed this precedent. We shall therefore propose the following section:—

*No person shall be admitted to, or confined as a patient or inmate in, any hospital, asylum, or other institution, house or place, for the care and treatment of the insane, except upon the certificate of two physicians, as herein provided,**

*This section is suggested by the laws of several States which commit on the decision of physicians.

The statute of New York is as follows: "No person shall be committed to or confined as a patient in any asylum, public or private, or in any institution, house or retreat for the care and treatment of the insane, except upon the certificates of two physicians, under oath, setting forth the insanity of such person."

The next question to determine is: How shall provision be made for competent medical examiners? It is certainly important that the certifying physicians be qualified for their duties, and that, if possible, they shall be so distributed throughout the State, that every community has such quasi-officials. The fact is now generally recognized in the larger number of the States that a reputable physician of skill and experience, and in active practice, is competent to decide wisely all questions relating to the commitment of the insane. While the medical schools of the country do not all give adequate instruction in nervous and mental diseases, it is nevertheless true that they generally teach more or less thoroughly the principles, and many give clinical instruction. It is also true that there is in every small community in the United States, however isolated, medical practitioners of reputable character, and graduates of incorporated medical colleges. In this manner the State may find the necessary medical examiners, and usually so distributed and located as to be easily accessible and immediately available. In the vast majority of cases, such physicians are professionally more or less familiar with the antecedents of the insane person, and are therefore still more competent to judge correctly in regard to every question which it may be necessary to determine. We propose, therefore, that each State recognize as a qualified medical examiner in insanity every physician duly certified to be of reputable character, a graduate of an incorporated medical college, a resident of the State, and in the actual practice of medicine. We propose, therefore, the following section:

It shall not be lawful for any physician to certify to the insanity of any person for the purpose of securing his commitment to custody unless said physician be of reputable character, a graduate of some incorporated medical college, a resident of the State, and shall be

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The law of Pennsylvania is as follows: "No person shall be received as a patient for treatment or for detention in any house or place, where more than one person is detained, or into any house or place where one or more insane persons are detained for compensation, without a certificate signed by at least two physicians," etc.

The Vermont statute is as follows: "No person except as hereinafter provided, shall be admitted to, or detained in any asylum, as a patient or inmate, except upon the certificate of such person's insanity, stating their reasons for adjudging such person insane, made by two physicians," etc.

*in the actual practice of his profession, at the time of making the certificate.**

In many States it is required that the examining physician shall have been in practice several years. This provision is intended to secure physicians of experience as examiners, and it is believed more competent men than recent graduates. But the error lies in the fact that the older practitioners have had little, if any, instruction in nervous diseases, and hence are really not as competent as the recent graduates, who have attended courses of lectures on insanity, and have had the advantages of clinical instruction. Speaking from personal experience in the examination of thousands of certificates of insanity, we do not hesitate to state that those made by recent graduates are, as a rule, far more exact and complete than those made by old physicians. We propose, therefore, only to require that the examiner is in actual practice at the time that he makes out the certificate.

A provision in the English lunacy laws makes it unlawful for a physician to certify to the insanity of any person who is to be committed to an asylum with which the physician is officially connected. While this restriction is probably of little, if any, importance it will appear to the public to be a safeguard against undue influence on the part of the physician, and, hence, should

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*In most of the States in which the qualifications of the examining physicians are noticed they are required to be of good reputation. The State of New York has made special provision for medical examiners as follows: "It shall not be lawful for any physician to certify to the insanity of any person for the purpose of securing his commitment to an asylum unless said physician be of reputable character, a graduate of some incorporated medical college, a permanent resident of the State, and shall have been in actual practice of his profession for at least three years, and such qualifications shall be certified to by any judge of a court of record." The following is the certificate:

STATE OF NEW YORK, }
COUNTY OF ..... } ss.
City, town or village of..... }

I hereby certify as follows:

1. I am a judge of.....which is a court of record within the State of New York, and reside at.....

2. That (from evidence laid before me).....of .....is a permanent resident of said State; that he is personally known to me; that he is a person of reputable character; that he is a graduate of.... .. which is an incorporated medical college at ....., in the State of ... ...; that he graduated from said college on or about the.....day of. .... 18....; and that he has been in actual practice of his profession for at least three years since that date, and he is on this.....day of.....189... hereby constituted an examiner in lunacy.

.. ..
... .

This certificate must be filed in the office of the county clerk, and of the State commission in lunacy.

be incorporated into the law. It is a question also worthy of consideration whether a physician should be allowed to certify to the insanity of a relation. Presumably a physician related to the patient would be the more anxious to deal justly by him than would a stranger, but as it not unfrequently happens that the insane allege that they are committed through a conspiracy of their relatives to secure their property, it is very desirable that physicians related to the parties should be exempt from any official act connected with their commitment. The following section of the law is therefore submitted:

*It shall not be lawful for a physician to certify to the insanity of any person for the purpose of committing him to an asylum of which the said physician is either the superintendent, proprietor, an officer, or a regular professional attendant therein: nor shall it be lawful for a physician to certify to the insanity of any person to whom said physician is related by blood or marriage.**

If we thus secure the evidence which justifies the commitment of an insane person, what further proceedings are necessary to complete the process? Evidently nothing is now required but to give to this evidence that judicial sanction and force which, in various forms, all the States now approve. In very many States this sanction rests upon a review of the evidence, as in any criminal suit, and a decision thereon. In some States, however, the judge merely administers the oath and certifies to the character of the signers of the certificate and the genuineness of their signatures. From the preceding discussion we conclude that the fact is satisfactorily established that a layman, even a judge of the highest court, is not competent to review the facts embraced in this certificate. The only person capable of sitting in judgment upon these facts is a medical man familiar with the disease-insanity. We shall, therefore, hold that those States have a process of commitment more nearly in accord with the rational and scientific treatment of the insane which requires only medical inquiry into the condition of the patient, and the neces-

*The law of Pennsylvaina is as follows: "Both of whom shall certify * * * that they are not related by blood or marriage to the person alleged to be insane, nor in any way connected as a medical attendant, or otherwise, with the hospital or other establishment in which it is proposed to place such person."

The statute of Vermont has an additional disqualifing condition as follows: "And the two physicians making such certificate shall *not be members of the same firm* and neither shall be an officer of an asylum in this State."

Massachusetts requires that neither of the physicians making the certificate shall be "connected with any hospital or other establishment for the treatment of the insane."

sities for the proper care and treatment in any individual case as a basis of commitment, but limits the judicial function to the administration of the necessary oath, and the certification of the character and qualifications of the makers of the certificate, and the genuineness of their signatures.

The certificate herewith provided shall have been made within one week of the examination of the patient, and within two weeks of the time of the admission of the patient, and shall be duly sworn to or affirmed before a judge of a court of record, who shall certify to the genuineness of the signatures and to the fact that the signers are duly qualified, as provided in section first of this act.

The certificate of insanity is regarded in many States as of sufficient importance to be made the subject of statutory regulation. This is a wise provision. Certain facts in relation to every person committed as insane should be made a matter of record, and unless the certificate contains the necessary inquiries such information will not be sought by the larger number of medical examiners. The form here recommended is designed to elicit the desired information, and at the same time embody the sworn statement of the medical examiners as to their qualifications, and to their personal examination of the patient:* It also has appended the certificate of the judge of a Court of Record.

The certificate above provided shall be in form and substance as follows:

STATE OF .....
County of..... } ss.
City, Town or Village of ... .

We,....., a resident of ....., County of....., State of....., and....., a resident of....., County of....., and State aforesaid, being severally and duly sworn, do severally certify and each for himself certifies as follows:

I. I am a graduate of....., which is an incorporated Medical College at ....., in the State of....., that I am a resident of the State of..... and that I have been in the actual practice of medicine from 18..to date.

II. I personally examined on the ...day of ...., 189.., ..., a resident of ....., of the State of ....

III. Inquiries were made in regard to and information obtained as follows:

* This certificate is, with slight modifications, that recently prepared by the New York State Lunacy Commission. The law of New York requires that the form of certificate shall be determined by that body. In the form above given the medical examiners are required to certify as to those personal qualifications of which the certifying judge may not be cognizant. The form and substance of this certificate do not differ materially from that found on the statute of many States.

(*a.*) Sex .. ; age....years; nativity [*if foreign, how long in U. S.*]....; color....; occupation... ; single, married, widowed? ....

(*b.*) Number of previous attacks....; present attack began ...18... [*If the patient has ever been an inmate of an institution for the insane, state when and where, and whether discharged recovered or otherwise.*] ...

(*c.*) Was the present attack gradual or sudden in its onset?

(*d.*) What is the bodily condition of the patient?

(*e.*) Is the patient subject to epilepsy?

(*f.*) Is the patient filthy or cleanly in dress and personal habits?

(*g.*) Is the patient violent, dangerous, destructive, excited or depressed, homicidal or suicidal? [*If homicide or suicide has been attempted or threatened it should be so stated.*]

(*h.*) What is the supposed cause? [*State both the predisposing and exciting cause.*]

(*i.*) Has the patient insane relatives, and, if so, state the degree of consanguinity, and whether paternal or maternal?

(*j.*) What are the patient's habits as to the use of liquor, tobacco, opium, etc.?

IV. As a result of my examination I find, and hereby certify to the fact that said ...is insane and a proper person for care and treatment in an institution for the insane, as an insane person under the provisions of the statute.

1. I have formed the above opinion upon the subjoined facts, viz:

Facts indicating insanity personally observed by me, as follows:

The patient said [*Here state what was said to each examiner separately unless said in the presence of both.*]

The patient did [*Here state what the patient did in presence of each examiner separately, unless it was done in presence of both*]:

The patient's appearance and manner was:

2. Other facts indicating insanity, including those communicated to me by others as follows:

[*State if there is any change in the patient's mental condition and bodily health, and, if so, what*]:

V. That the answers to the questions contained in the statement are true to the best of my knowledge, information and belief.

.....M. D.

. .....M. D.

I...., a judge of....which is a court of record of the State of... , do certify that the foregoing certificate was duly ...to before me by the above named ...and....on this....day of....189.., that the signatures thereto are genuine, and that the signers are physicians of good standing and repute.

....[L. S.]

This project of a law is submitted as embodying the principles which, in our opinion, should govern a State in the commitment of the insane. The form may be modified to meet any existing conditions without impairing these principles.

SUGGESTIONS FOR IMPROVED PLANS FOR TREATMENT OF RECENT AND RECOVERABLE CASES OF INSANITY.*

BY JOHN B. CHAPIN, M. D.,
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In recent years the tendency in plans of general hospitals has been toward specialization of treatment of various diseases, surgical conditions, and classes of patients that may be received. A general hospital of the present day would be considered incomplete without a receiving ward, a children's ward, a ward for the isolation of patients when necessary, and a well-appointed room for the performance of operations in accordance with the advances of modern surgery. The courses of study presented by our universities and technical schools, leading to post-graduate studies and the professions, are examples of efforts intended to furnish to students opportunities for special lines of study and investigation, for which they are fitted by natural bent and endowment. We need but to look in other directions to note similar tendencies of social forces toward specialization, and division of work.

The public hospitals for the insane are intended for all classes of persons of unsound mind. Recent and chronic cases of insanity, epileptics, paralytics and all conditions requiring custodial detention on account of mental unsoundness are received, excepting idiots and imbeciles. The first step that is usually taken by a State in making provision for the insane within its borders is to provide some place for the urgent necessities of a few, and, subsequently, the tendency of public sentiment is toward the complete substitution of State care and supervision in place of alms-house neglect and its attendant wretchedness.

Classification has of course always been found necessary in a hospital, and has been based mainly on the influence patients in various conditions are supposed to exert upon each other. The system of treatment at an early date was founded largely upon manifestations of mental disorder and conduct. The asylum was

*Read before the American Medico-Psychological Association, May, 1892.

considered to be properly administered when all of the quiet and well-disposed were placed together and the turbulent and noisy classed by themselves. Symptoms rather than their causes may have engrossed the greater amount of attention. If our fathers in the specialty were right in attributiug insanity mainly to moral causes, then, perhaps, they were correct in proposing to bring discordant elements closely together in order that one class might counteract the propensities of the other, or operate in some way upon the other by the wholesome influences exerted by association. The relation of physical conditions to mental disorder was not as well understood then as now, for the reason that there had not been as yet any accumulation of medical experience. The advance in the practice of general medicine has been gradual, showing little progress in thirty years. The special treatment of organs or parts has made decided progress. Greater advances have been made by the specialists than by the general practitioner, due undoubtedly to concentration of thought along narrower lines of investigation. In our own special work we know more about insanity and its treatment than was known when hospitals were first planned. The relation that mental disorder bears to impaired, exhausted bodily conditions and functions, is now better understood. We have a better comprehension of the prodromic or incipient indications of insanity, and of their import. We know that our patients, or a fair proportion of them, make a good recovery after liberal feeding, rest, the removal of insomnious conditions, the prolonged administration of tonics, and that the addition of twenty or thirty pounds in weight is the harbinger of recovery in so many cases. We have learned that a certain proportion of our cases of insanity are due rather to disordered functional action, resulting from deterioration of the quality of the blood and deficient blood supply. We also recognize the fact that another large proportion of hospital patients are chronics or incurables—that the brain has suffered damage from a chronic meningitis, paresis, or some organic degeneration. Whatever may be thought of devotion to that sentiment which some have entertained and continue to cherish—that no case is to be regarded as incurable or beyond hope of recovery—it is as well and as honest to bow to the logic of results, the statistical tables and our every day observations. Every hospital and

asylum has within its borders two distinct classes—the recoverable and the incurable.

In this connection we may make mention that there has been an improvement in the care of our patients—unnecessary restraints are abandoned or much reduced—the number of attendants in proportion to patients has been increased—the administration and service have been improved. There is at the present time a more favorable and sympathetic public sentiment toward the general interests of the insane, all of which the medical officers of hospitals and asylums consider to be a great moral support in their work, and in the consideration of new plans for their care.

It is not the intention to enter upon a discussion of insanity, its treatment or methods of management of the insane, although the subject which the committee has proposed as profitable to consider during a portion of this session, admits of a wide latitude, of which I hope members will take advantage. It is sufficient for my present purpose to recognize the existence of two classes in our asylums and hospitals for the insane—acute or recoverable patients, needing much medical attention, and the chronics, largely incurable, who do not need as much or the same kind of care; and to urge some principles that should govern the treatment of acute and recoverable cases. To assume that all need the same kind of accommodation, that all should live in wards exactly alike—subject to a uniform hospital rule and discipline—is a proposition that is not founded upon ordinary conditions of domestic and social life, where uniformity is the exception and not the rule. Such an assumption would be as absurd as one that all sick persons should be administered the same kind of medicine, or that surgeons should continue to attend their fractures with deformity through life. The association of large numbers of acute and chronic cases is an evil too serious to be continued without recognition by those who are contemplating changes, or the erection of new buildings. Some here may remember when it was a generally received opinion that the association of the two classes was beneficial, that one exercised a conservative effect upon the other, but I must state for myself that I believe the injurious consequences far over-balance the supposed good that results. Some of the injurious influences arise from the enforced contact of new and impressionable cases with complaining, disgruntled patients who have been a long time resi-

dents of the hospital, and the noise that comes from wards in close proximity occupied by turbulent cases. The administration of a hospital may seek, and properly too, to find occupation for patients on the farm, about the grounds and in domestic offices, who are taken out by attendants, leaving the wards with insufficient attendants to render necessary services to those not strong enough to engage in labor. The direction of large numbers, with all the interests that belong to a hospital and asylum, is very exacting, and the concerns of the majority class of the patients may come to engross the greatest share of the time of the staff. Reference is made to these common and daily experiences of hospital life, not to display vulnerable points, but to illustrate and impress the difficulties that attend the care of the acutely insane and the chronics in the same wards. Due consideration of the requirements of each class requires an efficient service for both, or one class inevitably suffers at the expense of the other. Another evil from the association of the two classes must be mentioned, the overcrowding of our institutions for the insane. Under existing laws in many of the States there is a constant transfer of cases of insanity of the lower and turbulent classes from alms-houses to asylums and a constant increment from irrecoverable patients. Some of our State asylums, although called "hospitals," are such only in name. Their original purpose has been so changed that they are mere crowded receptacles. The wards are so crowded that one must almost elbow a passage from one end to the other. The irritation, risks of personal altercation, the injuries that actually grow out of the friction of close contact in crowded wards, are a source of public complaint and disquietude, and of constantly recurring official investigations. It is time that medical superintendents should proclaim in louder terms than they have done the embarassments that attend their work, and absolve themselves as far as they can do so from some of the responsibilities which the service seems to impose. It is sufficient to state that many of these institutions are in a state of paralysis—that is the say, one of their important functions, that of healing, is suspended. The public criticism that is too often made of our hospitals, that the individual treatment of patients does not receive proper attention, is well made, and it is time it received more attention. Our hospitals and asylums are in

danger of losing their medical character, and some of these institutions that may be seen do not suggest any of the characteristics of a medical establishment, but rather of a crowded receptacle, where the members of the staff are principally concerned with the problem of the safe lodgment of their patients day and night. Any physician with a due sense of his responsibility must confess his inability to individualize or specialize the acute cases that mingle promiscuously in the throng. It is true that buildings for the insane have been erected, in some cases at great cost per bed, but the plans, while showing conveniences for internal administration and beauty of external architecture, possess no special principle advancing the medical treatment of the insane.

In 1852, I was connected with the old New York Hospital, when the wards of that structure—erected at great cost to last for centuries—were overcrowded with cases of typhus fever, then prevalent in the city and brought from emigrant ships. Temporary pavilions of wood were erected on the grounds. At first thought it was predicted that patients would suffer from cold and perish with complications and that other things would happen to them, if they were placed outside of the wards erected at great cost, and planned in accord with the state of science of that day. Soon, however, it was ascertained that the patients in the hemlock sheds did not suffer, but made better progress than those in the established hospital structures. To-morrow we are to take action upon a constitution for this body. It is true we have met together as an association now these forty-eight years, and during that period have been in order, although we have had no constitution or by-laws. Now we see the importance of better and more efficient machinery, by means of which a better quality of work may be done, with the hope that progress can be marked from year to year, such as has not been practicable in the past. So in our hospital work, we have gone on with the buildings as we have found them, or have planned them, and may think them perfect, but we should ask ourselves whether, with better planned hospitals, we may not be able to do better work. Suitable plans are as essential to the best results of hospital work as improved machinery is to the successful manufacturer. If I were asked whether plans of the present system of asylum construction offer the best opportuni-

ties for treatment of recoverable cases, or are in accord with the requirements that the present state of our knowledge demands, I must answer in the negative.

I do not know that all or that many will agree with me in the strong expressions here used. Some may take exception to what has been stated lest it impair public confidence; and others may still believe that a work with which they have been identified, and which they have thought in the right direction, complete in all respects, should not be hastily considered and undone. We all know how reluctant we are to tear down and reconstruct at pleasure what has been created at great cost and only after great effort. Hospital plans are, however, in a transitory, unsettled condition. The changes of recent years have been in the direction of segregation, the erection of detached blocks and wards for chronics, and infirmary wards for helpless, bed-ridden paretics, dements with dirty habits, the aged and infirm, and generally of better night care. Many of the plans of supplemental buildings erected for these cases are admirably adapted for their purposes, and have been suggested by good principles of administration. What greater relief can be afforded to a hospital than the removal of all dirty cases from the wards to a house where such cases can receive special care day and night. Even the asylums created for the care of the chronic insane which received little sympathy from this Association, at one period, have done, and can still do a good work for the hospitals in relieving them of their crowded condition. They can add much toward promoting the comfortable condition of the chronic class by an organization adapted to the varied occupations of a large community, relieving it of the restrictions that belong to the discipline and system of a hospital for recent cases. Chronic asylums, created and organized under State laws, are in one sense in the direction of an improved classification for the majority class, the fears that were entertained lest the standard of care would be lowered not having been realized, and will not be realized if under State direction.

Changes in plans having reference rather to the care of the chronics in supplemental buildings, have done much to solve the problem of State care of this class. Further changes should now be contemplated and considered for the special care of recoverable cases, in order to place our hospitals for the insane

on a higher plane, and remove injurious imputations and criticisms that are sometimes justly made. We should insist here and elsewhere that our institutions are in name asylums or hospitals intended to render ministrations of healing to the sick. They should be such in name, and in fact in respect to their administration, and in their plans for doing the best possible work. In every institution for the insane are to be found a certain number of cases of acute mania with exhaustion, acute delirious mania, nervous prostration with incipient mental disorder, insomnious condition, cases of melancholia, which in respect to the prospect of recovery from mental disorder or a prolongation of life may be said to be in a critical condition. They are misplaced in the ordinary wards, surrounded as they are by all of the disadvantages to which allusion has been made. They may be feeble, extremely susceptible to noises, suicidal, and need an unusual amount of personal attendance for their proper care, as well as much tact and persistence in their management. They may require, and should have, if necessary, two or three attendants available for their care every twenty-four hours, and the medical superintendent might properly organize a special service composed of the best trained attendants for this class. All of this service can be best provided for in a detached hospital block convenient of access to the medical superintendent, and under the care of a medical officer assigned to the building. The number of patients for whom this special accommodation would be required would not be large, and rarely exceed five per cent. The plan should provide for complete isolation of a patient if necessary; rooms arranged and constructed so that all noise made by a patient could be stilled; where noise and confusion existing in other wards could not be heard; and so accessible that a patient could be received into the hospital and in some cases even discharged, without contact with the unpleasant scenes, discomforts and depressing associations of which some properly complain before and after their discharge. When the hospital block was fully organized there would follow special baths, a gymnastic pavilion, a department for massage and electricity, under the direction of specialists, supplementing the whole hospital work.

The expense of erection of such a block for a hospital ward, apart and separate from the main buildings and its administration, would be greater, but would be warranted because the

patients treated in it would be recoverable cases, in that critical stage when the chances of life and mental recovery depend upon the best treatment during the early period of hospital residence. With such important interests in the balance there should not be and would not be objections to any reasonable expenditure, if there was any concurrence of medical opinion to warrant it.

If the suggestions which have been here briefly outlined were adopted, the results that would speedily follow would be the elevation of the asylums and so-called hospitals to a higher and proper medical standard; a reduction of the congested state of the wards; a specialization and individualization of acute cases that would greatly encourage systematic medical study; in placing the hospitals for the insane more directly in line with other medical institutions of the country; the promotion of the concentration of thought and the service of a hospital on special work; the instantaneous removal of the large institutions from the range of criticism to which they are now justly subjected; and, lastly, increase the confidence and estimation of our professional brethren, and of the community, in our hospital work.

ON MOTIVES WHICH GOVERN THE CRIMINAL ACTS OF THE INSANE.*

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The aim of jurisprudence is to repress crime, to protect the public and the community, and, concurrently, to sustain and insure the rights of the individual. Practically it is a serious problem as to what standard shall be adopted to determine the responsibility of those members of society who are mentally defective and who seriously offend the law, and thereby endanger life and property.

There are two classes of such individuals, between which in their social status and also in their relation to the law and the courts, there is a wide difference. The first and rather more numerous division consists of those who having, while sane, committed some crime, have been convicted upon trial and sentenced to penal servitude for varying terms of years, and, while serving their sentences, have become deranged. These cases, by reason of their requiring the special care and treatment peculiar to their mental disease, and not being amenable to prison discipline, are transferred from the penal institutions of the State to the various wards or asylums provided for the insane; in other words, they are ordinary convicts. Should their recovery ensue before the expiration of their terms of sentence, they are returned to the custody of the various penal institutions whence they came, to serve out the unexpired portions remaining.

Virtually, then, the first division of insane criminals which we find established, consists of convicts who have become insane after their imprisonment, and whose mental derangement is in no way connected with the commission of crime, but only exists as an accident in the lives of those who happen to be criminals, in the same way that it may happen to exist in the life of a person who is not. Their insanity, therefore, presents very little difference or points of interest beyond what is found in ordinary

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asylums and hospitals for the insane, except in so far as it is modified by the criminal type of character, which always lowers and degrades the individual. As a general rule, such criminals are not well educated ; are lacking in native talent and ability, and are deficient naturally in various ways, cunning and vicious in others, and, as their higher ideational powers have never been developed, there is an absence of well systematized and intellectual delusions. The standard of morality among them is low. Many of them are, by education and choice, habitual criminals. They are unreliable and weak morally, and resemble, as a class, the usual undesirable population which is found in penitentiaries and prisons. The fact of their being mentally diseased, however, holds no direct causative relation to their being criminals.

There is, however, another distinct class of the criminal insane that has a deep interest for the alienist as well as for the student of law and jurisprudence. It comprises a very large group, and consists of those who by reason of their insanity, and while laboring under stress of disease and such duress of mind as to render them irresponsible, commit flagrant and violent acts in serious violation of the law. These people are not naturally criminals, but, on the contrary, while in health are quiet, orderly and industrious citizens, usually fairly well educated, or at least occupying a social position of respectability. They belong rightfully, whether rich or poor, educated or otherwise, to that desirable element of society which has a regard for the law, and which aids in sustaining and upholding good government, and has, moreover, a due respect for the enforcement of pure morals in the community. In their normal condition of mind they would be far removed from the perpetration of crime, but through hereditary defects or acquired mental derangement, they are led to commit acts which before the law are criminal, and for which they ought not be held either morally or legally responsible. In the proper acceptation of the word they are in no sense "criminals." By habits, taste and disposition they are entirely distinct from that hardened condition of conscience and morality which is characteristic of those who voluntarily choose a life of evil doing ; nevertheless, the various acts which they commit are of such a character as to bring them before the bar of justice. Each case must be determined according to the merits of

the evidence presented. Some are acquitted upon the ground of insanity and committed to asylums to remain in custody until recovered, when they may be discharged upon certain statutory conditions. In the State of New York in serious offences the certificate of the Medical Superintendent and that of the State Commission in Lunacy is required, which, in addition, must receive the approval of a Justice of the Supreme Court. Others having been found upon trial to be insane are committed to asylums with the indictment still pending over them, and should they recover are returned to the custody of the courts, where proceedings may be resumed, or they may be otherwise disposed of according to law. If the patient's term of imprisonment has been a long one, and he has become demented and harmless through the progress of mental disease and consequent degeneration, or should other extenuating circumstances arise, the indictment may be dismissed and the patient discharged, usually a bond for his safe custody and maintenance being required and furnished.

It is a popular belief that the plea of insanity is often successfully interposed in order to shield criminals from the proper punishment consequent upon their acts. This is an erroneous supposition, as such a defence is seldom sustained, unless it has for its support a truthful basis in fact. On the contrary, individuals not properly criminals are often convicted and sentenced as felons and wrongfully held responsible for acts innocently committed by them while laboring under stress of mental disease, having been led and impelled thereto by reason of some delusion which overpowered them. Usually in such cases the fact of existing luancy is overlooked at the time of their trial, and is subsequently discovered in prison.

As a general rule those that become "criminals" by reason of insanity and are brought to trial are homicidal persons, or those who possess a tendency in that direction, who have a clear perception of right and wrong and a good understanding of ethics and morality. They usually justify their own acts by reasoning from the false premises of a diseased mind. In conversing with them they express a belief, abstractly considered, in the advisability of capital punishment or in life terms of imprisonment, and they recognize that it is for the welfare and proper protection of society that wrong doers should be punished severely as a deterrent from crime.

What, then, are the causes which lead to the criminal acts of the insane and to those deeds of unusual cruelty which are often of such an atrocious or startling nature as to fill a whole community with horror? It is popularly supposed that the insane are dangerous, and the following statement showing the character of the crimes committed by eighty-seven court cases now in the New York State Asylum for Insane Criminals sustains this common belief. The nature of the crime and the character of the delusion that led to its commission will be found very closely connected:

CRIMES COMMITTED.

Murder	38
Assaults in the first degree and attempts to kill	18
Dangerous assaults	10
Arson and attempt at arson	8
Burglary and larceny	10
Bigamy	1
Horse stealing	1
Disorderly	1
Total	87

In this table are included only those who, when brought to trial, have interposed a plea of insanity as a defense for their acts, and in it are comprised the total number of court cases now (1891) in confinement in the asylum mentioned.

Out of a total of eighty-seven cases, therefore, we find that thirty-eight, or nearly one-half, were charged with murder; and of this number several had taken the lives of many victims, one patient having killed, at various times, four people. An additional fifth of the whole number had committed assaults dangerous to life, with murder in view. Fortunately their attempts were unsuccessful, though in many instances they inflicted severe injuries. Still further, about one-ninth more were charged with assaults denominated dangerous. It will be seen, therefore, that about seventy-five per cent. of all crimes committed by the insane, and for which they are brought to trial, are those committed against the person, and which are either fatal in their results or at least dangerous to life. Such a large percentage, which is out of all proportion when compared with the crimes for which ordinary criminals are convicted, must naturally raise an inquiry as to

the reason why the criminal acts of the insane should be, as a rule, so murderous in their intent and nature.

In the insane the individual personality becomes abnormally prominent; their thoughts dwell upon themselves constantly and selfishly. They live in a condition of introspection and brooding, busy with their own ideas and with the strange promptings which come to them from within, and which they are often shrewd and careful enough to conceal.

The most common perversions of mental action giving rise to dangerous delusions pertain to the special senses, particularly to the sense of hearing.

Of the thirty-eight cases of murder enumerated, only thirty-two could be satisfactorily classified with respect to hallucinations, leaving six undetermined; of these six cases, one was an uneducated deaf mute, not insane, who committed a homicide and was by special enactment committed to an asylum, not being held responsible by reason of his deficiency. Four other old patients were so secretive or so dull mentally and the history of their cases so meager, that nothing definite could be established from the records either concerning their mental condition at the time the crime was committed or subsequently, excepting the fact of their present dementia. The sixth killed his wife to save her from an imaginary poor-house, being actuated by strong love for her and deep melancholia. Eliminate these six cases and we have thirty-two remaining, which we can tabulate as follows:

INSANE CHARACTERISTICS.

Hallucinations of hearing	28
Hallucinations of sight	16
Delusions of persecution	29
Delusions of poisoning	7

In the table which we first presented, of crimes committed, in addition to the thirty-eight cases of murder, there were also enumerated twenty-eight cases of dangerous assaults and attempts to kill. Of this number one was too demented to converse, one was an imbecile, three others were epileptics given to sudden paroxysms of uncontrollable anger and violence, and who at times were subject to periodical derangement of all the special senses. The epileptics, however, should be excluded as suffering from a neurosis, rather than from any form of insanity proper.

Eliminate these five and we have twenty-three remaining, whose hallucinations and delusions may be considered as follows:

INSANE CHARACTERISTICS.

Hallucinations of hearing	17
Hallucinations of sight	19
Delusions of persecution	9
Delusions of poisoning	6

I believe these statistical figures to be very largely in excess of those of a similar nature found among the insane in ordinary asylums. One cannot long be connected with an asylum for the criminal insane without being impressed with the wide prevalence of disturbances of the special senses, particularly that of the sense of hearing as well as delusions of persecution which exists among the inmates. The most direct approach to inner consciousness is through the avenue of the special senses. They are the surest and most certain means of arousing and holding the attention, and to them we render the largest credence. We believe the evidence of our own senses, especially if we allow their promptings to return and to become fixed. Sounds, sights and odors, all affect us most vividly and strongly, and when sensory impressions, the product of a diseased brain, are presented to a reasoning mind, it forms false and dangerous concepts resulting from them.

At first the falsity of these impressions and their improbability is often recognized. The early impulse in many cases is to throw them off or to account for their strange presentations in some natural manner, but by their return they eventually become ineradicable. Patients finally will often say that they know the voices they hear and the sights they see have a true existence, because at first they could not believe them and have only become convinced by their persistent reiteration. The constant recurrence of their hallucinations finally fixes them, and temporizing or dwelling upon them strengthens their hold until they dominate the insane mind. It is strange to witness with how much intelligence and reason trivial circumstances are finally bent and twisted to corroborate these false beliefs.

The chief factor to be sought for then, in accounting for crime, is largely of an individual character, and fundamentally the reason may be found in a wounding of the personality

through the medium of some one of the special senses. Few of these people believe themselves to be insane, practically none of them will admit it. Before dementia supervenes they converse readily and intelligently upon all subjects; they are well aware of the nature of their crime; they understand their relation to its moral and legal consequences; they believe, as a rule, in severe punishments and in the protection of society by the infliction of such penalties as shall prove a barrier to wrong doing; they recognize the insanity of those about them, and each one considers himself rather in a position to pity his neighbor for his mental alienation, and at the same time cannot recognize as such his own delusions. Two lunatics with similar ideas of persecution were once brought face to face thinking that each might see the absurdity of his own case as presented in another, but they turned away impatiently after a short interview, each remarking of the other that he was crazy. Many of these people are paranoiacs with supremely egotistical ideas of their own importance and work, and that they have superior mental endowments and attainments.

Believing fully, therefore, in false ideas which are the product of a diseased mind, harassed by supernatural voices, deceived by unsubstantial shapes which appear in seemingly real forms before them, conspired against in many imaginary ways by people around them, persecuted, their lives jeopardized and daily put in danger by poison in their food, by gases blown into the atmosphere about them, driven to desperation by the fear of mortal injury, they resist, day after day, the secret promptings to defend themselves, their lives, their property—all that they possess, until the provocation finally becomes too great, and they yield to an overpowering impulse. Their conduct is determined by very much the same course of reasoning that influences and governs mankind in general, but their premises are wholly wrong, and their acts the product of the sensory misrepresentations of a disordered brain. Of this fact they cannot be convinced, their hallucinations, their delusions, all the inner promptings of disease assume an actual existence to them, and reasoning upon these as a basis they justify themselves and pronounce their acts defensible.

As an example of how a sensitive and upright man can be swayed and driven about from place to place in the effort to

escape imaginary harm, only at last to yield to the overpowering force of his delusions, the following single case is related. This illustration will serve for many others, as did the story of Greek treachery which Æneas related to Dido:

"Et crimine ab uno disce omnes."

A young man of good character and ability, a skilled pharmacist and drug clerk, was employed in New York city. Upon one occasion a lady made a purchase of him and after she had left the store some one incidently told him that she was the sister of a famous actress, which was true. This was the starting point of the delusions and hallucinations which afterward took possession of him, driving him from place to place and from city to city in the vain attempt to escape from his persecutors. At the present time he recognizes the falsity of the insane ideas which led to all his acts that followed, but he then believed in them most firmly. During all his wanderings he kept his knowledge of these imaginary persecutions to himself, successfully concealing his true mental condition from his friends and acquaintances, and suffering in silence. Soon after the occurrence at the drug store, he heard the voices of people on the streets talking to each other and to him, saying that he once passed this lady on the street and did not recognize her, and that she, being violently in love with him, felt mortified and hurt thereby, that this imaginary slight became known to every one so that people generally, and even her coachman, would call to him and upbraid him for the manner in which he had treated her. These voices, which he attributed even to strangers passing by, were loud and frequent and sometimes startling, and constantly worried him.

So sensitive did he feel that he soon relinquished his position and went to Philadelphia, where he worked for less wages than in New York, in order to avoid the humiliation and disgrace occasioned by the imaginary remarks of people on the street. For a short time he was free from hallucinations there, but they soon reappeared in the old form and with the same intensity, so that he determined to hide himself, and secretly left Philadelphia and returning to New York, there bought a ticket to Savannah by steamship, and upon reaching that point immediately took a train for New Orleans. Upon his arrival in that city he was afraid to go out of the house, and kept al-

most wholly within doors, usually leaving his room only at night to buy newspapers and books to read. He would occasionally take a walk along the levees by the river side far from men and the crowded streets. During this time he made a few friends at his boarding house. Soon, however, the history of the New York affair, in some mysterious manner, became known in New Orleans and the old hallucinations returned. He was then carrying a pistol to protect himself, as he began to fear harm as well, and to feel resentful. He soon made preparations to leave New Orleans secretly, and in order to throw his enemies off the track, he asked a friend to buy a ticket for him to Cairo up the Mississippi. He really intended to go to St. Louis, but on the way up the river he became alarmed lest his destination might become known, and stopped off at Hickman, Ky, there taking the train for Nashville to throw his fancied enemies off his track. He was in constant fear that "jobs would be put upon him," and new alarms were constantly added. He went to Louisville, where he spent two months at a hotel. Here, also, he left suddenly, driven by voices in his ears, but in a note to his landlord explaining by some pretext his sudden departure and leaving money with which to pay his board. On this occasion he walked away from the city and went to various places near by, applying to several farmers for work without success. His means were now exhausted, and a desperate resolution was formed by him to return to Louisville, to seek work in some drug store and to defy his persecutors. He accordingly secured a new position where he worked as a druggist from May to September. His trials, however, continually grew greater and the voices louder and more insulting and belittling. People would shout at him suddenly behind his back, and when he turned to surprise them in the act he would find their faces impassive. He thought all these acts were connived at and abbetted by the owner of the store. One day he nonplussed and astonished his employer by accusing him of so doing, but his denial was so strong that for a short time the patient's fears were allayed and satisfied. He was not able to long endure the strain, however, and soon after again secretly left for St. Louis and then for Alton, Ill.

Finally, after extended wanderings, he again determined to return to New York, and carried out his purpose of returning,

arriving in the city about two years from the time his delusions first beset him, and after an absence of eighteen months.

Here he obtained work, but soon fancied that his employer was inimical to him and was endeavoring to aid his enemies: the same voices followed him and he determined to leave his place, telling his employer he only did so to escape his persecutors. He was induced to stay, his wages were increased and his mental condition evidently and strangely not recognized, although it had been suspected at various times by a few of the people with whom he came in contact and in whom he confided. Matters progressed, however, to such a point that he suddenly left to seek employment elsewhere, after an open rupture with the proprietor, whom he accused of slandering him and of talking behind his back. He was unsuccessful in at once securing a position and voices told him that his old employer was shadowing him and preventing him from obtaining work and that he was also ruining his reputation in the eyes of the world, and further that he had threatened to shoot him upon sight.

Naturally a quiet, peaceable, kind-hearted and sensitive man, most inoffensive and upright in character, as his long continued efforts to restrain himself had shown, he nevertheless was aroused to desperation and sought an explanation at the store. When the proprietor appeared, which he did unexpectedly, he fired at him in sudden agitation and fear, and, as he believed, in self-defense and killed him.

This case is related, and there are numerous parallel ones, only for the purpose of showing to what extremity a man may be driven and to what extent, while intelligently discharging his daily duties, he may be able to control himself in resisting impulses to do harm to others. His history is not all singular, and it may fairly serve as a type of a large class of the insane who suffer from dangerous homicidal hallucinations and delusions. In order to determine whether a given lunatic is unsafe to be at large or not, it is necessary to know the character of his delusions and hallucinations and the nature of his thoughts and inner consciousness which are based upon them. If he has hallucinations of hearing and entertains ideas of persecution, even though he may be capable, intelligent and possess a knowledge of right and wrong, he is dangerous at all times and like-

wise irresponsible. We can never know how much he is repressing, how varying his strength of will or what harmful designs he may cherish, unless his insanity is recognized and his mental condition becomes known through a searching examination made by some person possessing the required experience and training to enable him to judge. All dangerous lunatics, however, do not commit crime, often they struggle to maintain a careful self-restraint and may succeed in doing so for life, nevertheless like a toppling wall along a crowded thoroughfare they are a constant menace to society and stringent measures should be adopted for their restraint.

Again, in the first table of crimes committed, crimes against the person and those against property were divided, although a certain few cases of arson, in which the offenders were actuated by motives of revenge towards individuals on account of imaginary persecutions, should have been properly classified as crimes against the person, rather than against property, the design of the act being to inflict personal injury. It is the purpose of this analysis to make clear the extensive prevalence of derangements of the special senses, more commonly those of hearing and sight among those who commit assaults dangerous to life, and to direct attention to the large number of delusions of persecution present among people so afflicted. These two psychical disturbances, namely, hallucinations and ideas of persecution, are cognate to each other.

Turning our attention now to those who offend the law seriously but in a lesser degree, we find the following results among the twenty-one who committed crimes against property. Of this number three were too incoherent and confused to present any fixed ideas, two were imbeciles and the remaining sixteen are classified below:

INSANE CHARACTERISTICS.

Hallucinations of hearing	6
Hallucinations of sight	3
Delusions of persecution	5

It is a noticeable fact deduced from the above tables that in the category of minor crimes, dementia, imbecility and feebleness of mind are more often present, and hallucinations and ideas of persecution much less prevalent than among crimes of graver character against life. Many of the acts of burglary and

larceny enumerated were committed by feeble-minded persons without thought or plan, were stupidly conceived and would have resulted in no benefit to the perpetrator, even had they been successfully accomplished. Of the ten burglaries and larcenies, six were committed in a foolish way by those who were too demented to hope for any benefit or to entertain any reasonable motive. Of the eleven cases of arson and lesser crimes, three of the accused were so demented that the act must have been committed without a definite purpose, two were imbeciles, one was told to do as he did, and the other committed the deed through spite on account of being teased. The remaining four committed arson, and acted from motives of revenge which were inspired by hallucinations of hearing and delusions of persecution. Their acts were directed rather against the person, and psychologically should be considered as among crimes of that character.

We have endeavored to show that disturbances of the special senses are extremely common among the dangerous insane, that their thoughts are concentrated on self, that they are introspective and closely connect their delusions with their personal affairs, that they are egotistical and sensitive and led about by false premises, harassed by unreal fears which they believe to be founded on fact, and are persuaded that their lives character and possessions are in danger, and, therefore, that every motive of self-preservation urges them to defend themselves. Contrary to general belief they know, abstractly speaking, right from wrong, often evincing a very keen sense of discrimination, but the instinct of self-defense and self-preservation is stronger than any moral scruple, and if they were sane and the unnatural presentments of their mind were as actual and true as they believe them to be, the law would hold them innocent of crime. While the diseased mind may clothe all its imaginings with a semblance of truth and invest them with a real and substantial character, yet the moral sense may not be largely impaired, so that the insane often resist impulses to commit wrong acts and only yield when driven by feelings of desperation.

The courts only ask for a knowledge of right and wrong and an abstract understanding of the nature and quality of acts similar to those committed, and do not seek to ascertain as a

further test, whether the lunatic who commits a crime acted by reason of his duress of mind or, whether prompted by disease, he was so led astray that his action was the product of the disease, rather than of his own free will. This is the vital question to be determined: Was he, while possessing, in a general sense, a full knowledge of right from wrong, so influenced by the phantasms of his brain, so urged by imaginary voices, so controlled by imaginary sights and sounds and persecuted by delusional enemies that, against what would have been his normal conscience, and being moved by the instinct of self-preservation, he committed the act of violence through a sense of self-protection and in self-defense.

It has often been urged that the legal test of responsibility, which consists largely of a knowledge of right and wrong, should in some way be modified. Of the sixty-six cases who committed either murder or dangerous assaults, thirty-eight are to-day clearly aware of the distinction between right and wrong, but they place themselves upon the plane of having acted in defense of property or life, motives which are everywhere recognized as justifiable and right. Their inferences are based upon the delusions of a diseased mind. In our endeavor to fix responsibility let us seek always these hidden springs of action, and if the deeds of the criminal insane are the products of a morbid brain, and if the individuals who commit them are so led and so compelled by reason of disease that they are virtually not free agents, then their responsibility should cease even though they knew they were violating the law, but did so in what they supposed to be the defense of their homes, honor, property, lives and all that men hold themselves entitled to defend. It is true that the insane manifest intelligence, which they often possess to a large degree, so much so that a dangerous lunatic who was recently taken from an asylum upon a writ of habeas corpus pleaded his own cause before a jury and was by them declared sane and given his liberty against the remonstrance of medical men. He was soon after recommitted by reason of his threatening and insane conduct. Analogous cases are of more frequent occurrence than they should be.

It is equally true that the insane are actuated by motives, and usually motives of the strongest character, notwithstanding they are the victims of mental disease; but while they often de-

liberate and plan and are cunning enough to contrive means for carrying out their purposes, they are not free agents. Their premises are wrong; they have not the full use of their faculties. It is an utter fallacy to believe that the insane are always deprived of their reasoning powers; reason exists, but it is dethroned; it is not supreme; it listens to the promptings and suggestions of disordered senses. The eye, the ear, the touch, which are still relied upon for evidence, all deceive with false presentments of the outer world. It is possible for a person so affected to be even brilliant in certain directions, but in just so far as his hallucinations or delusions influence his conduct and lead him to think that he is deprived of his rights, or that he is persecuted; to that degree he is a dangerous lunatic. His resulting acts being the product of disease, he can not be held responsible; nevertheless, he should, for his own protection and for the protection of society, be held in safe and secure custody.

A PLEA FOR OPHTHALMIC WORK IN INSTITUTIONS FOR THE INSANE.

BY C. A. DREW, M. D.,
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"Difficulties attending the functions of accommodating and adjusting the eyes in the act of vision, or irritations arising from the nerves involved in the processes, are among the most prolific sources of nervous disturbances, and more frequently than other conditions, constitute a neuropathic tendency."

The quotation which I use as a text, I find on the twenty-first page of a little book entitled, "Functional Nervous Diseases: Their Causes and Their Treatment," by Geo. T. Stevens, M.D., of New York City. (D. Appleton & Co., 1887.)

It may add to the interest in my text that this work of Dr. Stevens, minus the supplement, was a prize essay which was awarded the highest honor from l'Académie Royale de Médecine of Belgium for the competition of 1881–1883.

It is not my object to defend the proposition of my text nor to assail it. In the context is found an able *a priori* argument in its defense, and strong support in the records of the results of treatment based on faith in the same.

To him who seeks professional opinions and records of the results of the work of others tending to overthrow the evidence offered by Dr. Stevens, the medical literature of the past six years furnishes an abundance.

If the proposition of the text is true, it is of much importance to every medical worker in institutions for the insane. Indeed, if it contain any considerable element of truth, it is well worthy our careful investigation. I would but do Dr. Stevens' argument injustice to attempt an epitome of it. The work I quote from is small and very readable, even though one does not assent to a single conclusion.

Dr. Stevens claims to have promulgated new and important medical truths; *i. e.*, he claims that the important *rôle* of eye strain in causing grave nervous disturbances has been nearly or quite overlooked, and especially that form of eye strain due to imperfect balance of the external muscles of the eye.

Before further discussion of my subject it may be well to define some terms, peculiar to ophthalmic literature, which may not be fresh in the minds of those not specially interested in ophthalmic work. Such of these terms as apply to the condition of the external ocular muscles do not appear in older works upon diseases of the eye, because they are original with Dr. Stevens, and first appeared in *Archives of Ophthalmology* for June, 1886, and in the *New York Medical Journal*, December 4th, of the same year.

Myopia, or short-sightedness (M.): Due to too long diameter of the eye ball from cornea to retina, usually acquired; parallel rays of light focus before they reach the retina.

Hypermetropia, or Hyperopia, far-sightedness (H.): Usually congenital, due to too short an antero-posterior diameter of eye; parallel rays reach retina before they focus, except the refractive power is increased by muscular effort.

Emmetropia (E.): Theoretically the condition of the normal eye; parallel rays just focus on the retina without any effort of accommodation.

Ametropia: Any departure from the normal refraction.

Astigmatism (As.): Usually due to unequal curvature of different meridians of the cornea, causing parallel rays passing through those different meridians to focus at different points, hence a blurred image, except the error can be overcome by accommodative effort.

Presbyopia: The failure of accommodative power due to advancing age.

Asthenopia: Pain upon effort to use the eyes.

Orthophoria (of Dr. Stevens): Theoretically the normal condition; all the external eye muscles are so balanced that there is no tendency to squint.

Heterophoria: Any departure from a well-balanced condition of the external ocular muscles—a tendency to squint.

The generic name "Heterophoria" is divided by Dr. Stevens into the special terms:

I. Esophoria: A tendency of the eyes to turn in.

II. Exophoria: A tendency of the eyes to turn out.

III. Hyperphoria: A tendency of one eye to turn up; so that we have right and left hyperphoria. When two of the conditions exist together he combines the terms, making a compound word such as hyper-esophoria, &c.

The well known "cast," or squint, or strabismus, is a manifestation of unbalanced external ocular muscles, and the heterophoria of Dr. Stevens would be a cast, in or out, up or down, except that the eyes are continually kept in line, when used, by an extraordinary expenditure of energy, which, according to the argument, impoverishes the general supply of energy, predisposes to neurasthenia, and tends to the exhaustion and irritation of the nerves in constant action to stimulate the weak muscles. These irritated and exhausted nerves transmit to the great nerve trunks from which they are derived their protest as pain. The constant drain upon the nerve centres exhausts, and finally produces that unstable condition which may manifest itself in the varied forms of the milder neuroses, and even in the spasms of chorea and epilepsy.

The proof offered is in the form of a record of relief and cure of grave and intractable forms of nervous disturbances without the use of any drugs, but due entirely to treatment directed to relieve eye strain.

Besides excruciating headaches and neuralgias of many years' standing and other distressing conditions, apparently due primarily to morbid conditions of the nervous system, Dr. Stevens reported a large percentage of cures of chronic chorea and epilepsy; the treatment consisting of dropping all drugs, correcting by suitable glasses any existing error of refraction, and, where heterophoria existed, producing orthophoria by a "graduated" tenotomy of the overbalancing muscle.

As heterophoria differs from squint in being a tendency of the eye to turn in or out, up or down, which can be habitually overcome so that there is no appearance of squint, so graduated tenotomy differs from the commonly practical operation for squint in that the operator cuts but a few of the central fibres of the tendon of the overbalancing muscle, close to the globe, without interfering with the insertion of the outer fibres or tendon capsule. After he "button-holes" the tendon—under cocaine only—he tests for muscular equilibrium, and, later, if necessary, divides more fibres to establish a perfect balance of the external ocular muscles—the end aimed at. The operation, as witnessed by the writer, seemed rather painful in spite of the cocaine, but not more so than the operation for hard cataract with iridectomy, and any one who could endure a tooth

pulled, without an anæsthetic, would probably endure this operation.

The more commonly practiced method of relieving the strain of muscular insufficiency, or heterophoria, by the wearing of prismatic glasses, is advocated by Dr. Stevens and his pupils to bring out latent heterophoria, principally, and very rarely as a final therapeutic measure, his practice being to provide the patient with those prisms which correct the manifest want of balance, to be worn a few days or a few weeks when, if there was hidden, or latent, insufficiency, it is likely to be manifest now, and the proper amount of weakening of the overbalancing muscle correctly indicated.

Those who have followed the discussions bearing on the relation of eye strain to nervous disturbances in the medical journals, during the past six years, are aware that Dr. Stevens' records have been challenged, his methods attacked and his conclusions ridiculed by men of long established reputation in the profession; while there have not been wanting men of ready pen and undoubted ability who have warmly supported him in the controversy.

In the spring of 1887 a committee from the New York Academy of Medicine, consisting of three neurologists and two oculists, was appointed to investigate Dr. Stevens' method of treatment for the relief of chorea and epilepsy. Dr. Stevens selected two additional members to act with the committee. These seven members were to furnish cases of typical chorea and epilepsy. Dr. Stevens was to treat said cases in the presence of these gentlemen, or a number of them. A complete record was to be kept of condition before, during and after the treatment, and a report made to the academy upon the completion of their investigation.

That Dr. Stevens consented to this severe test without reserve—to do work requiring more than ordinary care and much time, under the eyes of a committee appointed to approve or condemn him, demonstrates, it seems to me, professional honesty and entire faith in the principle he had advocated.

The committee succeeded in furnishing twenty-eight cases of epilepsy and chorea, but of these, fourteen were not reported upon because they did not remain under treatment a sufficient length of time. It appeared that some were not satisfied with

the effects of the first operations, and would not continue to be treated, while others removed from the city.

The committee reported to the Academy of Medicine, in the autumn of 1889, on the fourteen cases that had been under observation and treatment for four months and over. Of the five cases of chorea the report was: Much improved, 1; improved, 2; unimproved, 2. On the nine cases of epilepsy, the report was: Improved, 3; unimproved, 5; unknown, 1. All the cases remained under treatment, and no case could be considered recovered. Some of the epileptics reported unimproved, because the frequency of the epileptic seizures were not decreased, were much brighter than when taking bromides, and their friends considered them much better for this reason.

While the report of the committee was a disappointment to Dr. Stevens, and those who shared his enthusiasm, I apprehend that it was as favorable as those who have spent years in caring for large numbers of chronic epileptics would expect.

This committee did not report upon nor investigate, as far as I know, the relation of the less grave conditions of nervous disturbances, such as headache, neuralgia, neurasthenia, &c., to eye strain, and the value of the methods under consideration for the treatment thereof.

I do not understand that the cases of chorea and epilepsy selected were thought to be amenable to any treatment, and Dr. Stevens' protest against the committee's report claimed that pains had been taken to select incurable cases. Be that as it may, it is not my wish to criticise the premises nor conclusions of the able physicians who have advocated both sides of this question, but rather to call attention to evidence that warrants my plea for ophthalmic work in institutions for the insane.

I would protest against the ignoring of a possibly important factor in a given case of nervous exhaustion, or neuralgia, or headache, even as I would protest against the assumption that most cases of epilepsy and chorea are caused by a reflex irritation from the visual apparatus alone.

If one were convinced that grave morbid "molecular and chemical variations" could be caused in the cells of the central nervous system by a peripheral irritation, be it reflected from the visual apparatus, or from the generative organs, or from the digestive or respiratory tracts; yet he might be far from believ-

ing that all unstable conditions of the nervous system were due to irritation from one or all of these. But I never could feel that I had done my whole duty by the unfortunate one looking to me for help until I had tried my best, in the light of all knowledge at my command, to find all sources of leakage of nervous energy, and remove all possible causes of pain and exhaustion.

If Amidon can cure severe headache, vertigo and dyspepsia, intractable to drugs, by correcting errors of refraction and heterophoria with prismatic and cylindrical lenses;* if Mittendorf finds one thousand cases of headache more or less completely relieved by proper glasses, in two years of office work;† if Webster finds a single case of epilepsy due to organic disease which improved, without drugs, when a source of eye strain was removed by operation;‡ if Standish finds a large number of cases of neurasthenia and headache relieved by correcting errors of refraction and a few intractable cases yielding promptly after treatment directed to establish equilibrium of the ocular muscles;§ if Ranney can practically cure a considerable percentage of cases of chronic nervous derangements with such distressing symptoms as asthenopia, headache, neuralgia, mental depression, nervous prostration, insomnia, vertigo, choreic twitchings and convulsions of the epileptic type, without drugs;‖ then we ought not to be satisfied until we know whether the conditions exist which make exhausting "the accommodating and adjusting the eyes in the act of vision." I am not unmindful of the opinions of Loring,¶ Starr,** Roosa,†† Berry,†† and others who hold their views, nor do I esteem their opinions of little weight.

Dr. Roosa quotes Dr. Berry, of Edinburgh, who writes: "For my part I regard the practice which, to judge from the literature of the subject, is so common in America of frequently performing tenotomies, or so-called graduated tenotomies, for

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* *Medical Record*, April 23, 1887.

† *Medical Record*, July 18, 1891.

‡ *New York Medical Journal*, January, 1889.

§ *Boston Medical and Surgical Journal*, September 12, 1889.

‖ *New York Medical Journal*, March 13, 1886; January 7th, 1888; June 11th and 18th, 1892. *Medical Record*, January 14th, 1888, and June 22d, 1889.

¶ *Medical Record*, Janary 21, 1888.

** *New York Medical Journal*, January 18, 1890.

†† *New York Medical Journal*, April 19, 1890. †† *Medical Record*, March 26, 1892.

lateral deviations as a disgrace to modern ophthalmology. As to the frequent ordering of prisms for similar conditions, that is a practice which, while it displays the same ignorance, is open to less serious objection, inasmuch as it only affects the pockets of the patient, and that to a less extent than operative interference."

Did I believe entirely with this eminent oculist across the water my plea would lose little of its force. It is not for tenotomies nor for prisms—unless it be tenotomies or prisms that alone will relieve pain and stop a needless expenditure of nervous energy, but for careful investigation and conservative practice that I plead. Certainly the epileptic suffering from unusual pressure on the brain or organic brain disease, and whose relief may follow craniotomy,* is not the epileptic who is likely to be greatly benefited, if equilibrium of the ocular muscles be obtained by graduated tenotomy; though it cannot be denied that indications for both operations might exist in a given case. I have had no personal experience with graduated tenotomies for the correction of heterophoria, but have been well satisfied with the results in the few cases where I have prescribed prisms of low degree. In the large majority of cases, however, where eye strain was manifest, it has been my observation that neither prism nor tenotomy was needed to give entire relief.

That it has been the fortune of Drs. Stevens, Ranney and Woodward† to find a large number of cases with heterophoria as the principal abnormal factor, I cannot doubt.

The conclusions of Dr. Standish, as given in the *Boston Medical and Surgical Journal*, of September 12, 1889, seem to me eminently just and impartial.

It is not my purpose in this article to report upon the results of my own efforts to add to the comfort and well being of patients in hospitals for the insane by relieving eye strain; I could not report a single case of chronic epilepsy much improved by my ophthalmic efforts; and I can hardly hope for this. An inclination to believe the generally accepted opinion among hospital physicians, that the epileptic habit becomes of itself a predisposing cause, would cloud such a hope, however good it might have been, from the relief of a peripheral irrita-

* M. A. Starr, *Medical Record*, January 23, 1892.
† *New York Medical Journal*, February 7, 1891.

tion in the beginning. But it has been a common experience to brighten the shadows of a clouded life by helping one back to the free and painless use of his eyes. I have seen many a one brighten, grow more hopeful and gain in flesh when the asthenopia and headache which habitually followed an attempt to use the eyes for reading or sewing was relieved by properly fitting glasses. There is nothing brilliant in such results, but all the drugs of the pharmacopœia will not give the same relief. There is no tonic so sure and rational in its action as that agent which relieves a source of nerve irritation or stops a leakage of nervous force. It is a natural error to conclude because one person suffers little from a high degree of astigmatism, or a decided squint, or a great difference in the refraction of the two eyes, that all lesser deviations from the normal would produce less discomfort.

I cannot do better than quote from Dr. Burnett,* touching this point, who, in writing of headache due to eye strain, says: "In higher degrees of astigmatism, where no amount of accommodation can give distinct retinal images of any portion of objects, there is no temptation to strain it; and, as a consequence, we do not find asthenopia of this kind so often a symptom in the higher degrees as in the lower." A similar reason will explain why great differences of refraction of the two eyes and the great difference in the power of the external muscles of the eyes, which produce a squint, commonly cause no eye strain at all. There is no temptation to eye strain in these cases because no effort can make the eyes work together, *i. e.*, produce binocular vision.

I do not fear that he who has worked his eyes under the burden of astigmatism, or other source of eye strain, will think the strength of my plea to be theory alone.

To him whose eyes have perfect refraction and who thinks the whole question "much ado about nothing," it is suggested that he borrow a friend's glasses made to correct astigmatism. While he wears these glasses the conditions of astigmatism will exist in his own eyes. If he would inquire, in a practical way, whether hypermetropia might cause serious nervous symptoms, I would advise that he try another friend's glasses, made to correct myopia. While he wears these the conditions of hypermetropia

* "A Treatise on Astigmatism," Swan M. Burnett, M.D., J. H. Chambers & Co., 1887.

will exist in his own eyes. He may see fairly well through either glasses, and if he persevere in the wearing he will very likely realize within a few hours what eye strain means.

It is not claimed that the conditions would be exactly parallel with the natural errors of refraction; for, in the latter case, the change has been gradually developing or has existed from childhood, and a degree of toleration is likely to have been established; while with the artificial error all the nervous and muscular forces of the visual organs will struggle in rebellion until the forces are exhausted or the glasses are removed. The direct relief we can give many of our patients is not the only reason that might be urged for ophthalmic work, though to my mind it is the strongest. There are certain eye symptoms which are often helpful in making a diagnosis alike to the general practitioner, the neurologist, and the alienist—and he who cares for the insane must be all of these—symptoms which often escape notice because the observer is not accustomed to ophthalmic work. The retinal hemorrhage—an apoplectic danger signal; the neuro-retinitis—another witness to Bright's disease; the optic atrophy and "Argyll Robertson" pupil—when existing together so suggestive of locomotor-ataxia; a choroiditis of each macula with dustlike specs in the vitreous—almost pathognomonic of syphilis;* the developing soft cataract—possibly the first observed indication of diabetes; the swollen or "choked" optic disk—pointing strongly to brain tumor or other gross lesion;† these and other intraocular conditions have often a positive or negative value in cases of doubtful diagnosis, and always add to the interest of a medical examination.

I would deprecate as much as any one the dominance of any hobby in a hospital for the insane, and while I plead for ophthalmic work I would not exalt it at the expense of any other line of medical work. If one sees only eye strain and fails to inquire why those cheeks are flushed and that breathing quickened; why those lips are blue and those ankles œdematous; if he looks for evidence of nephritis in the retina alone and neglects to chemically and microscopically examine the urine; if he forget the significance of the abolished or exaggerated patella reflex and know not how

* D. C. Cocks, paper read before New York Academy of Medicine, December 17, 1889.

† H. C. Wood. Nervous Diseases, p. 331.

to interpret the presence of spasm or palsy; though he know the relation of optic atrophy to all the morbid conditions of the cerebro-spinal system, it will profit little. His opinions would be as unbalanced as the eyes of the most hopeless victim of heterophoria. And if he were so engrossed that he could not stop to cheer the depressed or attempt to change the current of morbid thought from self to hopeful subjects, then his special work would add but little value to his service. That this would be a common result of a special education in ophthalmology of an assistant physician in each hospital for the insane I do not believe. Indeed, it seems to me, the more light we throw upon our medical work, from whatsoever source, the more is the scientific spirit stimulated and the less like drudgery our work becomes. I know no reason why good ophthalmic work may not be done by physicians in hospitals for the insane unless it be want of encouragement to undertake the extra expense of preparation or the pressure of routine executive work. And it is hoped the time will soon come when patients in hospitals removed from cities, where an oculist's services are only available, will not be denied the relief from distressing asthenopia and exhausting headache, which, in certain cases, correction of errors of refraction or anomalous conditions of the ocular muscles alone can give.

In conclusion, I would urge attention to ophthalmic work, not as a substitute for other treatment of functional nervous diseases, but as an important adjunct to them. I urge not to accept the proposition which heads this article but to test it. I would not abate one jot all those efforts that come under the head of moral treatment, the employment, the entertainment, the concentrated foods, the sun bath and the tonic drugs. "All these things ought ye to have done and not to leave the other undone."

PROCEEDINGS OF THE AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION.

[Late Association of Superintendents of American Institutions for the Insane.]

The Forty-sixth Annual Meeting of the Association was held at the Arlington Hotel, Washington, D. C., May 3, 4, 5 and 6, 1892.

The following gentlemen were present during the sessions:

Andrews, J. B., M.D., Buffalo State Hospital, Buffalo, N. Y.
Atwood, Le Grand, M.D., State Lunatic Asylum No. 1, Fulton, Mo.
Baker, L. W., M.D., Riverview, Baldwinsville, Mass.
Bancroft, C. P., M.D., New Hampshire Asylum for the Insane, Concord, N. H.
Blackford, Benjamin, M.D., Western Lunatic Asylum, Staunton, Va.
Blumer, G. Alder, M.D., Utica State Hospital, Utica, N. Y.
Brooks, H. J., M.D., Illinois Northern Hospital for the Insane, Elgin, Ill.
Brush, E. N., M.D., Sheppard Asylum, Towson, Md.
Bucke, R. M., M.D., Asylum for the Insane, London, Ont.
Burrell, D. R, M.D., Brigham Hall, Canandaigua, N. Y.
Callender, John H., M.D., Central Hospital for the Insane, Nashville, Tenn.
Chapin, John B., Pennsylvania Hospital for the Insane, Philadelphia, Pa.
Clark, Daniel, M.D., Asylum for Insane, Toronto, Ont.
Clarke, F. H., M.D., Eastern Kentucky Lunatic Asylum, Lexington, Ky.
Cook, G. F., M.D., Oxford Retreat, Oxford, O.
Cowles, Edward, M.D., McLean Asylum, Somerville, Mass.
Crumbacker, W. P., M.D., Asylum for the Insane, Athens, O.
Dewey, Richard, M.D., Illinois Eastern Hospital for the Insane, Kankakee, Ill.
Edgerly, J. F., M.D., Assistant Physician, Friends' Asylum for the Insane, Philadelphia, Pa.
Edwards, William M., M.D., Michigan Asylum for the Insane, Kalamazoo, Mich.
Eyman, H. C., M.D., Cleveland Asylum for the Insane, Cleveland, O.
Godding, W. W., M.D., Government Hospital for the Insane, Washington, D. C.
Gorton, W. A., M.D., Butler Hospital, Providence, R. I.
Gundry, R. F., M D., The Richard Gundry Home, Catonsville, Md.
Hallock, W. B., M.D., Cromwell Hall, Cromwell, Conn.
Harmon, F. W., M.D., Longview Asylum, Carthage, O.
Hill, Charles G., M.D., Mount Hope Retreat, Baltimore, Md.
Hill, Gershom H., M.D., Hospital for the Insane, Independence, Ia.
Howard, Eugene H., M.D., Rochester State Hospital, Rochester, N. Y.
Hoyt, Frank C., M.D., Assistant Physician, State Lunatic Asylum No. 2, St. Joseph, Mo.
Hughes, D. E., M.D., Philadelphia Hospital, Philadelphia, Pa.
Hurd, Arthur W., M.D., Assistant Physician, Buffalo State Hospital, Buffalo, N. Y.

Hurd, Henry M., M.D., Johns Hopkins Hospital, Baltimore, Md.
Jelly, George F., M.D., 69 Newbury Street, Boston, Mass.
Kellogg, Theodore H., M.D., Resident Physician, Sanford Hall, Flushing, L. I.
Lane, Edward B., M.D., Assistant Physician, Boston Lunatic Hospital, Boston, Mass.
Lewis, J. S., M.D., West Virginia Hospital for the Insane, Weston, W. Va.
Long, O. R., M.D., Asylum for Insane Criminals, Ionia, Mich.
Meredith, Hugh B., M.D., State Hospital for the Insane, Danville, Pa.
Miller, J. F., M.D., State Hospital, Goldsboro, N. C.
Mosher, J. M., M.D., Assistant Physician, St. Lawrence State Hospital, Ogdensburg, N. Y.
Moulton, A. R., M.D., Assistant Physician, Pennsylvania Hospital for the Insane, Philadelphia, Pa.
Munson, James D., M.D., Northern Michigan Asylum, Traverse City, Mich.
Murphy, P. L., M.D., State Hospital, Morganton, N. C.
Noble, Alfred H., M.D., Assistant Physician, State Lunatic Hospital, Worcester, Mass.
Nunnemacher, Henry B., M.D., Assistant Physician, Pennsylvania Hospital for the Insane, Philadelphia, Pa.
Orth, H. L., M.D., Pennsylvania State Lunatic Hospital, Harrisburg, Pa.
Page, Charles W., M.D., Danvers Lunatic Hospital, Danvers, Mass.
Palmer, George C., M.D., Oak Grove, Flint, Mich.
Pilgrim, Charles W., M.D., Willard State Hospital, Willard, N. Y.
Preston, R. J., M.D, Southwestern Lunatic Asylum, Marion, Va.
Pussey, H. K., M.D., Central Kentucky Lunatic Asylum, Louisville, Ky.
Rogers, Joseph G., M.D., Northern Indiana Hospital for the Insane, Long cliff, Logansport, Ind.
Rogers, W. H., M.D., Assistant Physician, Eastern Kentucky Lunatic Asylum, Lexington, Ky.
Rohe, George H., M.D., Maryland Hospital for the Insane, Catonsville, Md.
Rucker, H. N., M.D., State Insane Asylum, Stockton, Cal.
Russell, James, M.D., Asylum for Insane, Hamilton, Ont.
Russell, Selwyn A., M.D., Assistant Physician, Hudson River State Hospital, Poughkeepsie, N. Y.
Semple, John M., M.D., Eastern Washington Hospital for Insane, Medical Lake, Wash.
Smith, S. E., M.D., Eastern Indiana Hospital for the Insane, Richmond, Ind.
Stearns, H. P., M.D., Retreat for the Insane, Hartford, Conn.
Stedman, Henry R., M.D., Roslindale, Boston, Mass.
Taylor, Edwin P., M.D., State Hospital for the Insane, Mendota, Wis.
Thompson, J. L., M.D., Assistant Physician, South Carolina Lunatic Asylum, Columbia, S. C.
True, G. P., M.D., Assistant Physician, State Lunatic Asylum No. 3, Nevada, Mo.
Tupper, C. E., M.D., Toledo Asylum for Insane, Toledo, O.
Wagner, Charles G., M.D., Binghamton State Hospital, Binghamton, N. Y.
Ward, John W., M.D., State Lunatic Asylum, Trenton, N. J.

Wegge, William F., M.D., Northern Hospital for the Insane, Winnebago, Wis.

Winslow, Frederic C., M.D., Assistant Physician, Central Hospital for the Insane, Jacksonville, Ill.

Witmer, A. H., M.D., Assistant Physician, Government Hospital for the Insane, Washington, D. C.

Wright, C. E., M.D., Central Indiana Hospital for the Insane, Indianapolis, Ind.

The Association was called to order at 11.10 A. M., Tuesday, May 3, 1892, by the President, Dr. Daniel Clark.

The PRESIDENT introduced Rev. Dr. E. A. Pace, of the Catholic University, Washington, who spoke as follows:

MR. PRESIDENT, LADIES AND GENTLEMEN OF THE ASSOCIATION: It is with peculiar pleasure this year that Washington welcomes you. The fact that it is not the first time that you have held your meeting in the National Capital, but that you have returned within a twelvemonth to transact important business here, is sufficient proof that you are no longer strangers in our city. You have already known what Washington's greeting is to you, and you may be sure that this second welcome, happily less formal than the first, is none the less hearty. I may say that every American is, and should be, at home in Washington, whether he come from the north, the south, the east or the west—it is all the same; in the National Capital he cannot be a stranger. But the men who come to Washington not merely to view its beauties or to enjoy such pleasures as it may afford, the men who bring to Washington the hard-earned treasures of science, these men are peculiarly welcome. It is the pride of Washington to gather around her, as far as possible, those institutions of learning, to assemble here in her midst those scientific bodies, which are equally the pride and glory of the nation. And no body of scientists could possibly excite more general interest than the gentlemen who are here to-day; because, if every line of scientific investigation is of interest in proportion to the nobility of its aim and to the number of branches which it affects, then we may infer that those who have the care of the insane can claim from the lovers and students of humanity a wider sympathy than any other class of workers. In your labors the psychologist, the physiologist, the moralist and the lawgiver are all concerned; from your gleanings, each will take somewhat to enrich his own store; and if it is my privilege to bid you welcome, your presence here will be my gain.

To one engaged in the work of psychology, even the darker phases of mind must teach a lesson. So must all who deal with normal man draw profit from each step onward in your domain. We study the body, as the physiologist does, or the mind, as the psychologist does, or the inter-connection of mind and body, but our knowledge, without your aid, must be imperfect. Your work brings you into daily contact with abnormal conditions; we hail the results for theory and practice alike; but we do not forget what patient effort they cost. We realize, to some extent, the difficulties in your way, and the necessity of lessening them by mutual assistance and this annual exchange of views. It is this especially that makes us all take an interest in the work that you have in hand. When I glance over your programme, I see that there

are subjects of the most varied kind and of far-reaching importance embraced in it. It is true we offer you the hospitality of Washington to-day, but I may say in return that it is you who bring us good things by sharing with us the fruits of your research. We can only thank you in advance and assure you of our appreciation of what awaits us in this meeting, and hope that while working, you may yet enjoy the pleasant interruptions of labor marked down for each day. Once more, then, gentlemen, in this blending of work and recreation, I bid you welcome to Washington, the National Capital, and trust that your labors may be as satisfactory as you anticipate. (Applause.)

THE PRESIDENT: Rev. Dr. Pace, of the Catholic University of Washington, we beg to thank you for the cordial welcome you have extended to this Association on the present visit to your city. This is not the first time we have convened in your beautiful city, and it will certainly not be the last. No visitor can ever tire in coming to Washington, which is a model metropolis and full of historic associations. Judging from our experience of past hospitality we are always sure of a hearty welcome. I hope we will not wear it out. As a citizen of a contiguous country north of you, but not by any means strictly an alien, I truthfully voice the opinions of our members who live across the border, that there is no city on this continent which, for beauty of situation, attractiveness and hospitality, can excel the Capital of this great Republic.

I, therefore, as the presiding officer, for the time being, of this Association, beg to thank you for your kindly welcome, and be assured we will make the most of our opportunities while we are assembled here.

Upon motion, the reading of the minutes of the last meeting was dispensed with, and the minutes were accepted as printed.

The Secretary read the names of the members of the following named committees which had been appointed by the President:

Committee on Nominations: Dr. W. W. Godding, Dr. J. H. Callender and Dr. John B. Chapin.

Committee on Time and Place of Next Meeting: Dr. R. Dewey, Dr. E. Cowles and Dr. P. L. Murphy.

Committee on Accounts: Dr. R. M. Bucke, Dr. R. B. Meredith and Dr. J. G. Rogers.

Committee on Resolutions: Dr. George F. Jelly, Dr. E. N. Brush and Dr. G. C. Palmer.

The President announced a recess to enable the committees to prepare reports and also for the registration of members.

The Association re-assembled at 11:45 A. M., President Clark in the chair.

THE PRESIDENT. The next business on the programme is the election of officers. Is the committee ready to report? Or any of the committees?

DR. GODDING. Mr. President: In behalf of the Committee on Nominations, I would report:

For President, Dr. Judson B. Andrews, of New York.

For Vice President, Dr. Peter Bryce, of Alabama.

For Secretary and Treasurer, Dr. John Curwen, of Pennsylvania.

In submitting this report I wish to say in behalf of Dr. Bryce that he had looked forward confidently to being with us at this meeting. We all remem-

ber his presence and his aid at the last meeting, and how he has stood at the south as a representative man. On account of sickness he is detained from this meeting, but we submit his name for Vice President.

THE PRESIDENT. You have the report of the nominating committee. Is it your pleasure that this report be adopted?

The report was adopted unanimously.

As no other committees were ready to report, Dr. Clark proceeded to read his presidential address, (see JOURNAL OF INSANITY, vol. 49, pp. 1–25.) At the conclusion of his address, Dr. Clark said:

I take great pleasure now in introducing to you the President-elect of this Association, my old and respected friend, Dr. Andrews, of Buffalo.

DR. ANDREWS. Gentlemen of the Association: I do not propose to make any extended remarks, but only to thank you for the honor you have conferred upon me. I feel that it is an honor to the State of New York, which has now its third representative in this chair; to the institution of which I am the head, and to myself personally. It is a great honor to be made President at this time, in view of the proposed action of the Association, in changing from the old to the new form, in passing from a state of retrospection to one of futurity, a change which we hope will be a step in the way of progress. The Association has certainly made most gratifying progress within the past few years, but we have reached a point where we can take even longer strides. The Association stands to-day as it has never stood before in the estimation of the community; in that it is a larger organization, and one that has a more wide-reaching influence.

I thank you again, gentlemen, but will not keep you longer here this afternoon.

DR. BLACKFORD moved that the thanks of this Association be tendered to the retiring President for his instructive and able address.

The motion was seconded by Dr. Callender and unanimously adopted.

DR. GODDING. In behalf of the Committee of Arrangements, I beg to submit the printed programme which those members who are not provided with will find upon the table, which provides for a regular session at three o'clock this afternoon and eight o'clock this evening, making this first day entirely a working day. On Wednesday we have a morning session and an arrangement for a ride and visit to the grounds of the Soldiers' Home, including the Barnes Hospital, the hospital connected with the Home, in the afternoon, and a reception by the President in the evening in the parlors of this hotel. On Thursday a morning session, and, if the day is favorable, an opportunity for a river excursion and a visit to Marshall Hall in the afternoon. Gentlemen, the Potomac shad heard of your coming and were glad. They are in prime condition and will be served up at Marshall Hall on Thursday afternoon.

The committee on re-organization have the right of way at the Thursday morning session. It was suggested at the last meeting of the Association that we devote an entire session to the subject of re-organization. It is hoped that your committee have prepared a report that will be so acceptable that there will be time for the papers following, which are arranged for on the programme. In any event, the business of re-organization will be the important topic of that morning and it will be important to have a full attendance.

It is customary to invite resident physicians and gentlemen who are interested in kindred pursuits or studies allied to ours, to be present and take part in our meetings, and I would suggest, as probably some are present at this time, that an opportunity be taken now to introduce to the members of the Association any who are present, and also at the beginning of the afternoon session or at any session during our meeting here, that an opportunity be taken to personally introduce them by naming the gentlemen and allowing them to rise, also gentlemen connected with the army and navy.

Dr. H. K. PUSEY introduced Dr. Thomas B. Satterthwaite, of Louisville, one of the Directors of the Central Kentucky Lunatic Asylum.

Dr. HOWARD introduced Dr. T. A. O'Hare, Miss Jane Rochester and Mrs. P. E. Graham, members of the Board of Managers of the Rochester State Hospital.

Dr. MUNSON introduced Mr. H. H. Noble, a Trustee of the Northern Michigan Asylum.

DR. JELLY introduced Dr. Charles E. Woodbury, of Boston, formerly Assistant Physician at the McLean and Bloomingdale Asylums, and now Inspector of Public Institutions.

DR. GODDING. An important omission in my announcement was the hospital known as St. Elizabeth, over which I preside, across the branch. I was warned by the brethren at the last meeting that one formal visit was enough there; that we should omit a similar visit at this time. I wish to say to the members of the Association that the doors of St. Elizabeth will be open night and day, and we shall be glad to receive an informal visit from any of the members of the Association at any time. You will have a hearty welcome. On considering the time we had at our disposal, I reluctantly relinquished the idea of a formal visit this year. I wish to say now that, although I myself may not be there at the time of your visit, my assistants will be there to welcome you.

And in behalf of the other institutions I would say that we have rather avoided their invitations in order that more time might be given to the business of the meeting. I know that the National Museum and all our public institutions will welcome our members, and if they will only say that they are members of this Association they will be courteously received.

DR. COWLES. One of our members, Dr. Channing, of Boston, sails for Europe to-day to spend a few months, and intends to attend the May meeting of the British Medico-Psychological Association. He is, as perhaps some of you know, the President of the Boston Psychological Society. I move that he be constituted a delegate from this Association to the British Medico-Psychological Association.

The motion was seconded by Dr. Daniel Clark and carried.

On motion the Association adjourned until three o'clock in the afternoon.

The Association was called to order at 3.15 P. M. by the President, Dr. ANDREWS.

Dr. BLACKFORD introduced Dr. Stone, Clinical Instructor in Gynecology at Georgetown University.

Dr. WAGNER introduced Dr. J. M. Semple, Superintendent of the Eastern Washington Hospital at Medical Lake, Washington.

The PRESIDENT. The first business of the afternoon is a discussion on "The Surgical Treatment of Insanity, Epilepsy, etc.," to be opened by Dr. Blumer, of Utica.

Before reading his paper, Dr. BLUMER said: I feel somewhat guilty in attempting to lead this discussion this afternoon, for the reason that the cases whose clinical histories I shall give were operated upon with very few exceptions by Dr. Wagner, and it seems that I am to some extent stealing his thunder. He was not a superintendent at the time I was appointed to lead this discussion, otherwise I should have deferred to him. While the confession of theft is satisfactory to myself, I don't know how you like to be regarded as receivers of stolen property.

THE SURGICAL TREATMENT OF INSANITY.—The purpose of this discussion, I take it, is less to give a résumé of what has been recorded in the recent literature of psychiatry touching the relation of surgery to cerebral therapeutics, than to bear the testimony of personal experience, and evoke, if possible, an interchange of opinion as to the curative value of surgical procedures in the treatment of insanity. Thus interpreting instructions, I shall confine myself in the main to the treatment of epilepsy by trephining, giving as my warrant for venturing to take up your time at all the fact that the topic was selected for me by the committee, and, second, that at the Utica State Hospital during the past year eleven patients (eight men and three women) have been treated surgically for insanity.

With the exception of two, the patients were all cases of epilepsy. The attention of the medical staff of the hospital was especially called to this field of operation by reading an address of Prof. J. W. White, of Philadelphia, on "The Supposed Curative Effect of Operation *per se*," delivered last August before the Surgical Section of the New York Academy of Medicine. During the preceding five years, this surgeon—with the late Prof. D. Hayes Agnew—had trephined in fifteen cases of supposed traumatic epilepsy. All recovered from the operation except an imbecile, who died. Of the fourteen cases remaining, all were said to have been markedly benefited by the operation, and as nothing abnormal was found in any of them except four, Dr. White was led to analyze and classify a long series of cases in which operation *per se* seemed to be the main factor in bringing about a cure.

Thus it appeared that in fifty cases of trephining for epilepsy nothing abnormal was found to account for the symptoms. Twenty-five of these patients were reported as cured, eighteen as improved, and in three cases it was mentioned that a relapse occurred later.

In thirty cases of ligation of blood vessels for epilepsy, fourteen were reported as cured, fifteen as improved; one died seven days after the operation.

In ten cases of castration for epilepsy all were reported as cured.

In nine cases of tracheotomy for epilepsy, two were reported as cured, six as improved, and one as much improved.

In twenty-four cases of removal of the superior cervical ganglia of the sympathetic nerves, six remained well at the end of three years; ten were improved.

In six cases of incision of the scalp for epilepsy nothing was found to account for the symptoms. Three of these cases were reported as cured at the end of three months or less, one as cured at the end of a year, and two were reported as cured at the end of two years.

Twelve cases of epilepsy were reported as cured by such operations as stretching the sciatic nerve, excision of the musculo-cutaneous nerve, cauterization of the larynx, circumcision, application of a seton to the back of the neck, tenotomy of the external recti muscles, burning of the scalp, puncture of the heart, etc.

From a consideration of these and other data, Dr. White deduced the belief that "powerful impressions acting upon the emotional or intellectual nature might affect the organic processes of secretion, nutrition, etc., and might arrest pathological changes and bring about a reparative or recuperative action." It was difficult for him to accept the theory of accident or coincidence as explanatory of the facts. (See Annals of Surgery, August, 1891.)

This was a view which practical alienists were not unprepared to share with Dr. White, as the result of favorable and equally striking experiences in the cure or relief of insanity by the intercurrence of disease or accident. Maclaren, of the Edinburgh Royal Asylum (Edin. Med. Jour. Jan., 1875,) called attention to several cases many years ago where counter-irritation, when applied empirically or even accidentally, had led to the cure of epilepsy. Long before him again, Schroeder Van Der Kolk adopted a similar line of treatment, apparently applying his counter-irritation with little reference to the natural history of the special case he was treating.

The simplicity of the theory, one might almost say the absence of it, and the very empiricism of the practice, fascinated the medical officers of the hospital and invited an *experimentum crucis*. It was therefore decided to operate upon a series of epileptic patients taken more or less at random, and to test the value of the operation of trephining *per se*, with or without a history of traumatism, in the treatment of epilepsy. Unless otherwise indicated by the history of injury or the presence of a scar, the operation was performed at about the same site and under similar conditions in each case. In only one case was the dura opened, a procedure rendered necessary by the occurrence of hemorrhage.

The following is a brief report prepared for me by Dr. R. R. Daly, of cases operated upon by Dr. C. G. Wagner, then of the Utica staff:

Case I.—J. C. N., admitted July 12, 1890, aged 34, married, clerk. General physical condition fair. Duration of epilepsy fifteen years. Had attempted homicide. Fits usually occurred at night. Was in Elgin Asylum nearly ten years; escaped, came east, threatened to kill his father, and was sent to the Utica Hospital. Was feeble-minded and irritable, frequently quarrelsome and occasionally violent. Had from three to five seizures a week, with an aura ascending from the abdomen. Gave a history of injury to his head when a child. There was a slight depression in the right parietal bone one inch behind the fissure of Rolando and one and three-quarter inches below the median line. No paralysis.

Operation performed September 10, 1891. Was trephined under strict

antisepsis over scar. Inner table found to be uninjured; dura appeared normal; was not opened. Mode of dressing: wound washed with bichloride solution (1–2,000,) drainage by braid of catgut; silk sutures, iodoform dusting on wound, bichloride gauze and absorbent cotton.

Dressings changed every day on account of slipping; drainage withdrawn on third day; stitches all out and patient sitting up on sixth day. Highest temperature, 105.

Result: Severe seizure on eighth day; was put on bromide of potassium, grs. 30 t. i. d., for ten days. October 11, patient not irritable. October 13, two more seizures, not severe. Dressings and bromide renewed. Patient was entirely free from seizures for two months and eight days, when several occurred in one day after over-eating. Patient continued feeble-minded and again became irritable. Two months later seizures had occurred with as much frequency as before the operation, although patient was able to exercise somewhat better self-control. Up to April 27th, patient has had twenty-five fits since the operation.

Case II.—M. O'B., admitted December 8, 1888, aged 19. General health fair. Duration of epilepsy five years. Mother feeble-minded, brother and sister epileptic. Has had several seizures each month since admission; is very feeble-minded and stupid; no paralysis.

Operation performed October 27, 1891, over the scar of an old scalp wound. Point of trephine entered 1½ inches back of the fissure of Rolando, and 2½ inches below the median line. Bone proved to be uninjured. Mode of dressing as in previous case. Mode of healing, immediate. Highest temperature 99 5–10.

Result: Patient remained without seizure for a month, when fits recurred, and he has had from three to six a month since. Mental condition unimproved.

Up to April 27th, patient has had twenty-five fits since the operation.

Case III.—L. N. F. admitted June 11, 1890, aged 35. General physical condition fair. Duration of epilepsy ten years, *grand mal* and *petit mal*. Has several attacks of *petit mal* daily, in some of which he laughed aloud and lost consciousness from a few seconds to a few minutes. No appearance of injury on skull. Mental condition fair; was able to do clerical work in office; temperament irritable. No paralysis.

Operation performed October 29, 1891, at a point immediately behind the fissure of Rolando and two inches below the median line. Dura mater uninjured. Dressing as in previous cases. Wound healed rapidly by first intention.

November 4th, all stitches and drainage removed from wound and patient allowed to go about the ward. Highest temperature 99.6.

Result: Had seizures from the day after the operation and has continued to have them every day since.

Up to April 27th patient has had more then twenty-eight fits since the operation.

Case IV.—M. D., admitted September 15, 1891, aged 38. General health fair. Meditated suicide. Had had epileptic fits for thirty-five years; no history of injury until fourteen years ago, when he was struck on the right

parietal region, where there remained slight depression. The accident was followed by violent seizures occurring at intervals varying from one week to three months. Would leave the house and wander about the town while his upper extremities were convulsive. Mental condition feeble; no paralysis.

Operation performed November 17, 1891. Trephined at the upper part and over the line of the fissure of Rolando. When the button of bone was lifted and removed an artery was found entering the inner table about the centre of the button. This artery was torn off and free hemorrhage followed. The dura was cut in order to secure the cut vessel and apply a ligature. A second button of bone was removed with a 5-8 inch trephine in order to facilitate the control of the hemorrhage. Mode of dressing as in previous cases. Wound healed by first intention. Highest temperature 99.6.

Evening of first day: Complete motor paralysis of left upper extremity; sensory paralysis, partial. The third day, complete paralysis of both left extremities. Wound appeared healthy. Patient unable to defecate or urinate. December 20, faradic electricity applied daily, together with massage. Patient is able to move his toes slightly. December 26, moves his fingers. Urine still drawn. January 25, 1892, is able to walk a little and move his forearm fairly well. Urine passes freely. February 12, 1892, seizures yesterday and one to-day, first since operation. Has had four seizures during the month of March. Patient's mental condition is one of enfeeblement. Patient continues feeble in mind and is occasionally irritable. No paralysis.

Result: Remains essentially as before operation.

Up to April 27th patient has had ten fits since the operation.

Case V.—B. W., admitted October 18, 1890, aged 16, single. General health fair. Duration of epilepsy fifteen years. Mental condition feeble. No paralysis. Head imperfectly developed. Has four to eight seizures a month; very irritable and disturbed about once a month.

Operation performed November 17, 1891. Seizure occurred during etherization; convulsion more marked over left side. Was trephined over right motor area, upper third (?) Dressing as before. Wound healed by first intention. Highest temperature 99.

Result: Epileptic seizure second day; two seizures at the end of a week, milder in character than before. At the end of one month patient was in much the same condition as before the operation. Up to April 27th patient has had forty-three fits since the operation.

Case VI.—W. F. L., admitted August 7, 1890, aged 36, single. General health fair. Duration ten years. Mental condition dull. No paralysis. Had been getting violent after seizures. Is said to have had one once in six weeks. Seizures irregular as to frequency—several one month and none the next.

Operation performed November 24, 1891. Point of trephine entered two inches below median line and two inches behind the fissure of Rolando. Dressing as before.

Result: Patient had seizure on eighth day; up on ninth day. Wound healed by first intention. Highest temperature 104. In four weeks seizures occurred as before.

Up to April 27th patient has had twenty-one fits since the operation.

Case VII.—C. P. C., admitted July 29, 1890, aged 33, single. Threatened suicide and homicide. General health fair. Duration of epilepsy eight years. Had convulsions following scarlet fever when eight years old. Has from three to twelve seizures a week, is often irritable and violent.

Operation performed December 3, 1891. Trephined two inches below the median line and two inches back of the fissure of Rolando. No surface indications; dura uninjured. Dressing as in previous cases. Wound healed by first intention. Highest temperature 100.8. Patient up on the eighth day; slight seizure on the eleventh day. Patient was cheerful and hopeful until December 6th, when he had a severe fit and became depressed. Average of one fit a week during the next three or four months.

Result: No essential benefit.

Up to April 27th patient has had twenty-four fits since the operation.

Following are the notes of a case of epilepsy operated upon by Dr. Mabon:

Case VIII.—C. M. S., aged seventeen, admitted September 13, 1889, suffering from epilepsy of four years' duration. Family history bad. Patient's father was an habitual drunkard, paternal grandfather died insane, and both his grandparents also died insane. Paternal grandmother was healthy so far as known. Patient's mother was an epileptic, paternal grandfather died in consequence of alcoholic excess, paternal grandmother healthy. Of the children of the maternal grandparents, one son was insane, two daughters died of epileptic dementia. The exciting cause of patient's epilepsy was said to be fright occasioned by an attempt on the part of her father to strangle her during a drunken fit. The second seizure occurred six weeks after the first. Patient continued to have seizures at intervals of six weeks until a year before her admission to the hospital, since which time they have recurred every two weeks both diurnally and nocturnally. From September 1, 1891, until November 18, 1891, patient had in all thirty-five seizures. The convulsions commenced in the left hand, generally in the middle finger, sometimes extended over the entire body, and occasionally limited to the left side.

Patient was trephined November 23, 1891, over the fissure of Rolando, in the region of the motor centre for the left arm. Under ether and before the scalp was incised, patient had a unilateral seizure, commencing in the middle finger of the left hand and limited to the left arm. After removal of the disc, the dura mater was examined, but aside from the fact that it pulsated somewhat, nothing of importance was noted. The wound was dressed under strict anisepsis, as in the male cases. In the afternoon, the temperature rose to 101 4–5, falling in the course of the day, however, to 99. The following day temperature at 4 P. M. was 102. Dressings were changed and wound appeared healthy. The next morning temperature was normal, did not rise above 99 1–5. Five days after the operation wound was found to have healed by first intention, and the sutures were removed. The seventh day following the operation patient had a convulsion, mild in character beginning in the right hand. In the evening of the same day she had another somewhat more severe, but occurring on the same side as the first one. During the first month seizures occurred once or twice in ten days, but since then until the present time they have occurred as frequently as ever, generally commencing on the left side.

Case of Dementia—Trephining. Case IX.—A. L., woman, aged forty-five, admitted December 3, 1887, suffering from melancholia, said to be due to a fall on the back of her head which she had sustained five years previously. Family history was negative. Patient was said to have been bright, cheerful and industrious before the accident, since which time she had become irritable, depressed, destructive, homicidal and suicidal. Her memory was much impaired, and she mistook the identity of members of her family and friends. For a time after admission patient continued melancholy, exhibited strong suicidal tendencies, refused food, and was fed artificially. She gradually became demented and was subject to occasional outbursts of violence. For a year prior to the operation she was untidy as to her person, careless in her habits, frequently soiling her clothing and bedding. As the patient was in good health, and her friends were willing to have the operation performed, it was determined to apply empirically the test of operation, *per se*, by trephining.

The operation was performed by Dr. Mabon, November 20, 1891. The scalp showed no evidence of injury. A trephine opening was made over the centre for the left arm. Ths skull was of unusual thickness, and one button of bone was removed measuring in its thickest portion but 1-32 less than half an inch. The dura appeared thickened, but was otherwise normal and did not pulsate. The wound was closed antiseptically as in the previous case.

The following day the temperature rose in the afternoon to 100. Patient was restless and hard to control. Six days after the operation all dressings were removed and the wound was found to have healed by first intention.

Patient's condition has improved in this respect, that she has become more tidy in her habits, and only soils her clothing occasionally. She is also less restless and more easily controlled. Her memory continues impaired as before; patient is unable to appreciate her condition and surroundings. It is fair to say that the improvement as regards habits in this case may, perhaps, be accounted for on the theory of greater personal attention, by reason of special nursing, and the creation of a habit of cleanliness.

Case X.—In the following case, in which the patient was trephined by Dr. Mabon, the sensory phenomena formed a guide to the localization of the lesion and the operation modified the symptoms:

H. S., woman, aged 60, admitted November 25, 1891, suffering from melancholia of six months' duration. The son-in-law, a physician, who accompanied the patient to the hospital, stated that she had in health always been of a bright, cheerful disposition, and an active, industrious woman. About six years previously she had been struck on the head by the iron portion of a bedstead. She lost consciousness, and was ill for a week or so afterwards, although no subsequent untoward effects were noticed. Patient apparently recovered from the injury, and was in her usual health until April, 1891, when marked mental changes began to occur. She imagined that her neighbors were talking ill of her, thought that people were trying to poison her by throwing dust in her face, for which reason she would cover her face with an apron. She has heard imaginary voices constantly and has occasionally answered them. A few weeks ago she complained of smelling bad odors, also of a sensation of being cut in the left leg. She had wandered away from

home to the houses of relatives, in order to escape her tormentors. Is at all times depressed and cries a great deal. Her disposition has changed from that of a cheerful, kind woman to that of an irritable, fault-finding one. The doctor attributed her insanity to the injury she had sustained six years previously. An examination showed a marked depression in the skull over the right ascending parietal convolution, in the sensory area for the leg. She complains of perverted sensations in the left lower extremity; that she has feelings of being burned, cut, having her flesh pricked with pins. She also had marked hallucinations of hearing and smell. On admission to the ward patient complained still further of these sensations, was restless, excitable and declined to take nourishment.

Operation was performed November 5, 1891. At the site of the injury the pericranium was detached from the skull. A button of bone one inch back from the fissure of Rolando on the right side was removed with an inch trephine. Another button, taking in the depression on one side, was also removed, and the wound thus made was enlarged with a rongeur. The dura mater appeared normal and was not incised, the opinion of those present being that if the symptoms of irritation did not subside with the removal of the bone, the wound could afterwards be reopened, the dura incised and the cortex examined. The buttons of bone removed were very thin over the site of the injury, consisting only of a thin lamina of cancellous tissue. The wound was dressed antiseptically, as in the previous cases, and a braid of catgut was left for drainage. The temperature at no time rose above 99.8; after November 8th, remained normal. All dressings were removed November 14th.

Patient remained under observation and treatment until December 30th, when she was removed against advice; meanwhile the patient had improved considerably. All symptoms of irritation of the centre for the left leg had subsided and the patient had gained in flesh and strength. The hallucinations of smell and hearing continued, however, and annoyed the patient considerably. Nevertheless she was far more tractable than at the time of her admission. She took food freely and was less suspicious. This partial improvement was gratifying, inasmuch as the patient was relieved of the symptoms for which she was operated upon. There is little room for doubt that the perverted sensations of being cut, etc., of which the woman complained, were the result of the cranial injury for which the trephine was employed.

Case of Epilepsy Treated by Castration.—A. R T. was admitted to the Utica State Hospital October 16, 1890, suffering from epilepsy, which had existed since his second year. When two years old, patient fell from the table in a convulsion, and epileptic seizures had continued almost daily ever since. Patient had been unable to go to school or engage in any of the ordinary pursuits of boyhood. On the supposition that the epilepsy was due to phimosis, patient was circumcised when about seven years of age. After the operation the seizures were somewhat less frequent. Later he complained greatly of nocturnal emissions, which were unaccompanied by any amorous sensations. Patient has never been addicted to masturbation. Has taken a great variety of patent medicines, chiefly bromides. Aura occurs in a sense of constriction in the throat. Fits are not severe in character and last but a

few minutes. Patient improved under treatment, gaining flesh and strength, as well as in mental activity. Seizures, however, occurred two or three times a week. Patient went home April 18, 1891.

Was re-admitted January 27, 1892, having returned for the express purpose of undergoing the operation of castration, with the hope of relieving the distress consequent upon frequent erections and nocturnal emissions. He said that he felt weakened by constant drafts on his system. Father and son had also been led to believe that such an operation might relieve the epilepsy. Both were willing to sign an agreement absolving the medical officers from all responsibility growing out of the performance of such operation. Having in mind ten cases of castration for epilepsy referred to by Dr. White, (loc. cit.,) and in all of which cures were reported, the opportunity seemed favorable in this case to apply an experimental test. Especially were we moved to comply with the request in this case, in view of certain inquiries on the part of the father as to whether relief might be obtained for the patient by coitus. There was surely nothing to lose by placing an epileptic thus sexually *hors de combat.*

The operation was performed by Dr. Wagner, February 1, 1892, with strict antiseptic precautions. The pubis and scrotum were shaved and the parts thoroughly cleansed with bichloride solution. An incision was made in the lower part of the scrotum over the front of the right testis. The gland was rolled out of its coverings, carefully separated from the surrounding tissues, and thoroughly cleansed with bichloride solution. A silk ligature was passed through the spermatic cord about an inch above the gland and tied in halves. The spermatic cord was then cut through immediately below the ligatures. The left testis was removed in the same way. The sides of each wound were brought together with a single suture, iodoform was freely applied, and the parts covered with a slight dressing of cotton. Patient made a prompt recovery from the effects of the ether, and was very comfortable during the afternoon. He suffered no pain in the scrotal tissues. Patient's urine was drawn for four days, after which he passed it voluntarily.

On February 11th he was allowed to get up, on which day he had a hard seizure—the first since the operation. February 14th, had another seizure. February 20th wound was healed up, with the exception of the openings for the silk ligatures that are fast to the cord. Feels greatly relieved mentally because he is not annoyed by erections and emissions. February 22d and 23d, had slight seizures. February 27th, was discharged and allowed to go home.

Since his discharge patient has grown stout and improved in general health. Seizures continue to occur on an average of three times a week and are essentially the same in character as before. Patient asserts that he is in much better general health and gets up in the morning refreshed, while before the operation he felt weak and languid on rising.

Remarks: While the succession of comparative or complete failures, reported in the foregoing instances, was almost a foregone conclusion, the report of such failure is perhaps justified on the score of novelty alone. It has been so usual of late—and indeed when not?—for optimistic reporters to rush into print, with alleged cures of epilepsy, that one is prone to believe with Von Bergmann that surgeons may have recorded such recoveries with a reservation, referring in fact merely to the operation itself, much as we

frequently read in our newspapers of successful laparotomies in issues of the following morning! Certainly there is nothing in our experience at Utica to give color to theory of a curative effect by operation *per se*. Indeed, in no department of mental medicine does the road to success lie in empiricism. If we are to succeed in cerebral surgery, it must be by dint of caution, careful study of individual cases and by experience. The most that we can claim for our cases is a slight improvement immediately following the operation—an mprovement that might very well have occurred as the result of some new, *non-surgical* treatment. At least in some of the cases it seems permissible to assume a certain inhibitory effect by reason of the mental attitude of strong hope and eager expectation of cure, struck and maintained for some time by the patients operated upon. Far be it from me to say one word in discouragement of further experiment. The new cerebral physiology on the one hand and modern antiseptics on the other beckon the surgeon into comparatively new and alluring fields. The brain has ceased to be a dark continent. MacEwen, Horsley, Keen and many others have shown us what can be accomplished as the direct fruit of Broca's epoch-making discovery. It is encouraging to bear in mind the numerous instances in which focal lesions have been successfully diagnosed and successfully treated. And, notwithstanding the fact that in many cases of brain tumor the seat of disease is such as to preclude removal with safety, there are on record at least thirty-two cases in which even tumors have been successfully removed and the patients restored to comparative health and comfort. (Edin. Med. Journal, April, 1892, Ferrier.)

After all, as regards epilepsy, we must not forget, as Sachs points out in his recent thoughtful paper, "What Can We Expect from the Surgical Treatment of Epilepsy?" (N. Y. Med. Jour., February 20, 1892,) that it "is a symptom, not a disease, and that it is often merely one of a number of symptoms pointing to organic disease of the brain—to tumor, hemorrhage, abscess or widespread meningitis and sclerosis."

Féré and Chaslin (quoted by Dr. Sachs) made a careful microscopical examination of five brains taken from epileptic subjects, and discovered an ncrease of neuroglia tissue with the formation of small fibrils emanating from the spider cells of the neuroglia. The latter observer infers that this is a sort of gliomatous sclerosis, which sclerosis is to be found in epileptic brains of entirely normal microscopical appearance. And in so-called genuine epilepsy "secondary sclerosis is the pivot upon which the entire question turns." Under these circumstances one could scarcely expect the simple operation of trephining, performed more or less empirically, or any other operation *per se*, to be followed by the miraculous disappearance of these pathological products. The cases, therefore, in which operation seems to offer a hope of success are those immediately due to traumatism, and undertaken with a view to the prevention of the development of secondary sclerosis by excision of the area supposed to be diseased. This, however, is a field in which I have had no personal experience.

Dr. P. C. Knapp, of the Harvard Medical School, (Boston Medical and Surgical Journal, January 7, 1892,) points out that in cases of injury of the head we may have two factors: first, general commotion of the contents of

the cranium, and, second, local injury to the skull and the brain beneath it. The first factor is always present, while the second is not constant. It is, unfortunately, by no means easy to determine how far either one of these factors predominates in the causation of epilepsy in an individual case, nor can we, as yet, decide whether the trouble be due to general commotion or to local irritation. Hence every operation must be merely tentative.

The Surgical Treatment of General Paresis.—The profession is indebted to Mr. Harrison Cripps, Dr. T. Claye Shaw and Dr. Batty Tuke, in Britain, for their attempts to popularize the surgical treatment of general paresis by trephining. The propriety of such surgical interference was suggested by the hope of relieving intracranial pressure by draining off the accumulated fluid, and by perhaps affording a modified system of nutrition for the brain and another channel for the elimination of waste products. While little is to be expected from the mechanical treatment of this dread disease, we should all welcome any procedure that gives even moderate hope of temporary relief. Assuming, as we have a right to do, that many of the secondary symptoms of general paresis are due to water-logging of the brain, and that this continued pressure results in atrophy of the cells, it is not unreasonable to look for improvement by tapping. As a matter of fact, such was the immediate result in the English cases that have been reported, but, as yet, no satisfactory means have been devised, or at least carried out, for preventing the re-accumulation of the fluid. Mr. Cripps' theory is, (or was,) that by removing the membranes and placing the skin in direct apposition with the brain substance, we introduce a new lymphatic arrangement by which the fluid can be absorbed. He assumed, therefore, that the larger the portion of bone removed the better, and proposed by removing the intermediate bone to increase the amount of skin brought into direct contact with the brain substance. Unfortunately, post-mortem findings do not support this theory, for the trephine holes appear filled up by a rough fibrous membrane, showing that, as regards pressure, the original conditions of resistance had been restored.

Dr. Batty Tuke has suggested the maintenance of drainage so as to allow the squeezed cells a chance of regaining their proportions, and thus remove the original source of hyper-secretion. As it is considered impossible to do this by operation at the base of the skull, Dr. Tuke proposes laminectomy of the second or third lumbar vertebra, puncture of the arachno-pia, as suggested by Mr. John Duncan, and the insertion of horse-hair. Mr. Duncan has performed the operation at this spot for traumatism, and had no difficulty in establishing a free flow of cerebro-spinal fluid. Although the flesh wound is deep, the arachno-pia can be easily reached. Dr. Tuke considers the operation justifiable in early cases with symptoms of intracranial pressure, and expresses his intention of performing it in the first suitable case that comes under his care.

I believe I am warranted in claiming for Dr. C. G. Wagner, of Utica, and now Superintendent of the Binghamton State Hospital, the credit of having performed the first recorded operation in America for the relief of intracranial pressure in general paresis. Our patient was a burly negro, J. U. F., aged 32, married, a native of New York. He was admitted to the hospital July 23, 1889, suffering from well marked general paresis. It progressed typi-

cally to the third stage, and the spring of the following year found him very unsteady, demented, dirty, talked but little, and indulging the common propensity of collecting rubbish, etc. Such was his condition when, on March 14, 1890, he was suddenly seized with convulsive movements of his left arm and leg. There were also twitchings of the muscles of the face on the same side, accompanied by vomiting. The convulsions continued two hours, the arm and leg were now partially paralyzed, and the patient was duller and more stupid than usual. The paralysis gradually increased until the morning of the 16th, when there was complete loss of motion and sensation in both arm and leg of the left side, and the patient was only semi-conscious and unable to speak.

The operation of trephining was performed under strict antisepsis, the trephine being applied directly over the fissure of Rolando, about midway of its length. A button of bone was removed and the trephine applied a second time, slightly overlapping the first bore. The uneven points of bone were afterwards cut away, thus enlarging the original opening. On removing the bone, the dura, tensely distended, was pressed up into the opening by the fluid beneath, and when it was cut with the knife a large quantity of fluid immediately gushed forth. By turning the head from side to side some additional fluid was drained off, making the total quantity about six ounces. The convolutions of the brain could now be seen at a distance of over three-quarters of an inch from the inner table of the skull. It was apparent that the convolutions were flattened and that the pia mater had a slightly milky appearance, but no evidences of hemorrhage were visible. The cavity between the brain and dura was then carefully irrigated with bichloride solution (1–3,000,) and the cut edges of the dura stitched together with sterilized catgut sutures, the wound in the scalp closed in the same manner, with the exception of a small opening in the most dependent part, in which a braid of catgut was left to facilitate drainage. A simple dressing of absorbent cotton was then applied.

The patient recovered in a short time from the ether and immediately made slight movements with the fingers of the paralyzed hand. He followed the movements of persons in the room with his eyes, and spoke several words. That night he was very quiet, slept soundly, and scarcely moved when awake. The following morning his temperature was normal, pulse 100, respiration 20. He opened his eyes when spoken to, looked about him, but made no reply to questions, nor would he swallow the food that was placed in his mouth. There was no perceptible movement seen in either the arm or the leg. In the afternoon his temperature rose to 100.8, and his pulse to 120. He occasionally made slight movements with his fingers, but there was no other change. He slept the entire night, and on the morning of the second day after the operation he awoke with a temperature of 98.5 and a pulse of 90. He ate a hearty breakfast and talked more intelligently than he had done for several months previous. He asked for several articles of food and inquired when he might go home. Motion of the fingers was noticeably increased, but he appeared to be still unable to move his leg. His temperature remained normal throughout the day. In the morning of the third day after having slept well his temperature was 98, pulse 92; he was very talkative and slightly incoherent. He moved his hand and arm actively, pulling the bedding from side to side, but the grasp of his fingers was still weak and there was no

sensation in the thigh or leg, although when his toes were pricked with a pin he quickly retracted the leg. This was the first time since the operation that he had exhibited any control over the muscles of the left leg. The dressings were removed from the head, and there was found a slight tumefaction of the scalp and a small amount of sanguineous discharge on the cotton. The wound was in good condition, and after irrigation with bichloride solution the dressings were re-applied. On the fourth and fifth days there was slight rise of temperature in the afternoon. The dressings were removed daily, the parts thoroughly cleansed, and some of the stitches removed. The seventh day union of the scalp was formed. There was no longer any discharge, and the remaining stitches were taken out. By this time the patient was able to use his left hand and arm nearly as well as his right, and he had regained power of his left leg to such an extent that he got out of bed and walked across the ward without assistance. He exhibited also a change mentally, becoming exceedingly garrulous. His appetite was enormous and he gained strength rapidly until at the end of three weeks he was able to walk and to help himself much better than for several months prior to the seizure. This increased mental and motor activity continued for about three weeks, when the patient again began to lose control of his left hand and leg and manifested less mental activity. He had difficulty in swallowing, and frequently soiled his clothing and bedding. He failed rapidly and several times exhibited slight spasmodic contractions of the left hand and forearm. He remained in this condition about a week and then died.

At the autopsy it was found that the dura had grown together again, and the opening in the skull made by the trephine had been bridged over by a dense, strong, fibrous membrane, and there was no evidence of any recent local inflammatory process. There was an accumulation of pus over the right hemisphere one inch below and somewhat in front of the place of trephining. The right hemisphere was considerably shorter than the left, owing to contraction of the frontal lobe. Over the upper part of the frontal lobe the dura mater formed a sack-like fold, the size of a pigeon's egg, lined by a hemorrhagic false membrane, and containing a turbid serous fluid. The false membrane over the right hemisphere extended backward from the occipital lobe into the longitudinal fissure, and the right lateral sinus contained a solid thrombus. Over the left hemisphere the hemorrhagic false membrane was most marked over the parietal lobe, but became finer and more transparent and yellowish as it extended forward over the frontal lobe. The whole brain was contracted and weighed but little over forty-four ounces.

As the disease was far advanced at the time of the operation, and the patient was rapidly settling into a state of profound coma, there can be no doubt that his life was prolonged nearly two months by this operation.

Although this case has already been reported by Dr. Wagner, in the AMERICAN JOURNAL OF INSANITY, (July, 1890,) I refer to it in this connection in the hope that others may be sufficiently encouraged by the result to operate in similar cases. Trephining being a simple and safe operation, under strict antisepsis, and general paresis being a chronic progressive disease, it seems to me that surgeons need have little hesitancy about using the trephine. It would be especially interesting to see the suggestion of laminectomy, as made by Dr. Tuke, carried out in a suitable case.

At the conclusion of Dr. Blumer's paper, the President, Dr. ANDREWS, said: We are fortunate to-day in having Dr. Wagner here to make some remarks upon the surgical treatment of insanity.

Dr. WAGNER: Dr. Blumer's paper has reviewed the subject to such an extent that my experience in connection with it enables me to add little, if anything, more. Dr. Blumer, however, with his characteristic modesty, in giving credit to me for these operations, has omitted to state that they were done only with his advice, coöperation and encouragement. I have, for several years, given some attention to this subject of surgical treatment in cases of insanity, and, previous to Dr. White's report, had read in the journals of a number of scattered cases in which the results appeared to give a great deal of encouragement. In almost every case about which I read, the patient was reported "recovered," or, at least, greatly "improved." Very little indication of failure appeared in any of these reports; consequently, when I read this long series of cases reported by Dr. White, I felt convinced of the propriety of trephining in the great majority of cases of epilepsy. I, therefore, conferred with Dr. Blumer, and, with his advice and assistance, performed the operations described, with what results you are already informed. Now, although I am not prepared to offer any special arguments in favor of this method of treatment in idiopathic epilepsy, it seems to me that failure in this comparatively small series of cases, notwithstanding the fact that the failure was uniformly complete in nearly all of them, ought not to be considered as finally disposing of the subject. These cases were operated upon with the trephine in the usual way, by a small semi-lunar incision through the scalp and simply the removal of a button of bone. In only one instance was the dura cut through, and that was by accident.

Dr. White, you will remember, spoke of operations, *per se*, and of the strong mental impressions, which he considered a striking element in the curative process. My operations were performed with a view to testing this point especially. The results were not satisfactory, but the fact that under antiseptic precautions the operation is attended with almost no danger, seems to give ample justification, and I think, therefore, that we need have no hestitation in trephining in epilepsy. I have in mind at this moment a case of which I recently read where a man was kicked by a horse. He was kicked in the right temple, and several days later was seized with violent convulsions. During the next fifteen days he had from six to ten violent fits daily. It was observed that the attacks began with twitching of the left corner of the mouth, which was followed by a loud cry, unconsciousness and violent opisthotonos. Some loss of power was also observed at the time of the attack in the left leg, and there was tenderness over the right temple. Every attack began with a twitching of the left zygomatic, so that it was evident there was a discharging cortical lesion in the facial center of the right side, *i. e.*, the ascending frontal and ascending parietal convolutions of the right side. The center of the trephine was applied two and one-quarter inches behind, and two and one-half inches above the external angular process, and a button of bone was removed. The dura was incised and reflected, and two small blood-clots were found on the brain tissue. These blood-clots were removed, but it was noticed that every time the brain was touched there was twitching of the opposite side of the

face, especially at the angle of the mouth. The wound was thoroughly cleansed and properly closed. Healing occurred promptly. The man recovered from the operation, and, at the time the case was reported, there had been nothing further seen of the fits.

Dr. BUCKE. How long?

Dr. WAGNER. A period of about three months after the operation. In regard to the case of general paresis of which Dr. Blumer has spoken, the operation was performed about two years ago. The result gave some encouragement, but was not very satisfactory; still, it seemed to me that, when we consider the hopelessness of the disease under ordinary treatment, we are warranted in making further trial of surgical procedure.

I think of nothing more to add to Dr. Blumer's paper beyond saying that it is my intention to investigate this subject further, and I hope to report better results at a future meeting of the Association.

Dr. ROHÉ. A week ago last Thursday I had the opportunity of doing an operation on one of my patients similar to those related by Dr. Blumer and Dr. Wagner. The case was one of traumatic insanity, not epilepsy—no motor disturbance at all. The man was struck on the side of the head by an elevator crank about eight years ago. He was unconscious for about twenty-four hours. What exactly was done at the time by the two surgeons who saw him I do not remember, indeed, never have understood exactly. But, seven years after the injury he manifested decided symptoms of mental aberration. He began to wander away from home, became very turbulent, and was then taken to a general hospital in the city of Baltimore. A depressed area was found on his skull. An operation was done, some of the bone was removed, and he recovered from the operation. My understanding was that he improved after the operation, and later on a second operation was done and more bone was removed. He finally came into the hospital at Catonsville less than a year ago, and when I found him there he was almost constantly walking up and down the hall laughing in a silly manner, tearing his clothing and talking disjointedly almost constantly. Last week after shaving his head and preparing him antiseptically, I made a flap of the scalp in the usual manner, chiseled away a part of the bone, gnawed off more with a rongeur, separated the adherent dura from the edge of the bone, and closed the scalp wound, leaving a bone defect 2 x 2½ inches. On the seventh day the sutures were removed, everything found firmly united. He had not had an elevation of temperature above the normal until the night before the removal of the sutures, when it ran up to 100, but promptly came down after he had received a saline purge. He is now quiet, on the best hall in the house, does not walk up and down at all, talks comparatively little, answers questions intelligently and does not manifest any of his silliness of manner. How long that improvement will continue I am not yet able to say.

The subject, however, which Dr. Brush has asked me to discuss is that of the relation of the removal of the ovaries or uterine appendages, or perhaps other operations upon the genital organs of woman, to insanity. In order to find out first what had been done in this matter elsewhere, I corresponded with the superintendents of all the hospitals or asylums for the insane in the United States and Canada, and I take this opportunity of thanking the officers

in charge of the hospitals for the promptness and fullness with which they have responded to my inquiries. I received answers from one hundred and twenty medical officers connected with institutions, responding fully to the questions asked. I find that a very careful analysis could not be made of these answers, because some of the operations were not done for the mental condition, but for the physical condition, so I lumped together the results obtained in these answers, and find that operations were performed for the removal of the ovaries and uterine appendages for insanity, epilepsy, hystero-epilepsy, ovarian and tubal disease and ovarian cystoma. I separate ovarian and tubal disease from ovarian cystoma because abdominal surgeons now-a-days limit the former terms to the results of intra-pelvic inflammation. The operations were done in insane hospitals or in other hospitals while the patients were under the charge of the insane hospital. I find that a number of cases were taken out of the insane hospital, taken to the general hospital, operated upon and then removed again to the insane hospital. These cases are all included in my statistics. I have not asked for the reports of individual operators, because there would be some uncertainty sometimes as to what exactly the operation was done for. There is considerable confusion, I believe, in the mind of the general practitioner and the abdominal surgeon as to what really constitutes insanity, and I have learned that many operations have been done for certain neuroses, and the temptation is to magnify the gravity of the neuroses; but I apprehend that when a patient is is an insane hospital and has been there for some time, and has been properly committed there, and has been in the charge of an alienist competent to observe and make a diagnosis, I think there is very little difference of opinion among alienists that this person who was so committed to the hospital was a proper subject for treatment in an insane hospital.

Thirty-nine cases of abdominal section, consisting of removal of the ovaries and uterine appendages, have been reported to me from these one hundred and twenty hospitals. The results are: Three cured mentally, with the restoration of the normal physical condition. I have taken no account of the others, except the mortality.

Three cases are reported out of the thirty-nine mentally restored, a percentage of 7.7.

Nine cases are reported as mentally improved, a percentage of 23.

Eight cases died, a percentage of 21.

Nineteen are reported as showing no improvement mentally.

In the Maryland hospital for the insane, I have operated since the 6th of last October on fourteen cases with the following results:

Four mentally cured, a proportion of 28.6 per cent.

Three were decidedly improved, a proportion of 21.4 per cent.

Two died, a proportion of 14 per cent.

Five have, up to this time, shown no improvement.

Summing up then, out of a total of fifty-three cases operated upon in American (including Canadian) hospitals, I find a proportion of 13.2 per cent cured mentally and 23 per cent improved; a total of 36.2 cured and improved; 19 per cent deaths. Now, I am not prepared to say that in any one of these cases that are reported to me as cured, or that I have taken the lib-

erty of reporting here as cured, the cures will be maintained. I don't know whether the Association will demand that a patient discharged as cured of mental aberration shall be eternally cured. [Laughter.] I assume that a great many cases have been discharged as cured when no operation is done, that come back to the hospitals, either to the hospital from which they were discharged or to other hospitals. While these four cases I speak of are still in the hospital I have detained them for the purpose of showing them to such members of the Association as find it not too much trouble to visit Spring Grove. I don't propose to keep them indefinitely, of course, but if any members of the Association would do me the compliment of going to Spring Grove on Friday afternoon or Saturday or Sunday, I should be very glad to show them these cases. Next week I expect to discharge four of them as recovered.

I could relate the particulars of the cases, but I thought it better not to take up time in doing so. I may mention, however, that I began the work, not with the intention of curing insanity by the removal of the uterine appendages. I began upon such cases as showed upon examination decided physical disease, or the result of former disease, adhesions of the ovaries, tubes, displacements of the uterus, or in which the uterus or vaginal canal showed the absorption of septic matter formerly. I believe that in the cases particularly that I am ready to discharge, the origin of the mental aberration was in the absorption of septic matter in the vaginal canal after delivery, or that it was due to persistent irritation following inflammatory adhesions in the pelvis.

Incidentally in this inquiry, it occurred to me that it might be somewhat interesting to find out how far the opinion was justified that a very large number of cases of abdominal section were followed by insanity. This question was included in the circular letter that I sent out and the cases reported following oöphorectomy, ovariotomy and hysterectomy. There were twenty-six cases of insanity following the abdominal operations upon the sexual organs. Eight of these recovered and were discharged from hospitals cured—a per cent of 31; two were improved, a percentage of 8, making a total of 89 per cent discharged from hospitals. Four died, a percentage of 15. There are still under treatment twelve out of the twenty-six.

I am strongly under the impression that cases of insanity following either shortly or remotely after operation upon the sexual organs, or where the uterine appendages are removed, are not simply due to the operation, but that they are cases of insanity resulting during that period of the changed condition of the woman's life which we frequently meet with during the natural climacteric; that indeed a good many are such, while some of the cases that occur immediately after the operation are probably either septic or toxic and due to the absorption of agents used as antiseptics. A considerable portion of those following remotely, say two or three or five or six months after the operation, are probably cases of climacteric insanity.

Although you are familiar with the statistics, I may quote in comparison with this 31 per cent of cures and discharged as cured, in cases of insanity following operation, the proportion of cures following in cases of climacteric insanity. Dr. Merson in the West Riding Asylum reports, showed a recovery of 41 per cent of cases of climacteric insanity. I am under the impression that that percentage is a little larger than we usually have in the

United States hospitals, but there is not such a great disproportion between the 41 per cent of recoveries in natural climacteric insanity and the 31 per cent of recoveries in what I have ventured to call an artificial climacteric nsanity.

I would repeat the invitation to the members of the Association present to visit Spring Grove after the adjournment of the meeting, and I would be glad to have them see the cases that have been operated upon and those I have considered as recoveries. If it be the pleasure of the members, I should be glad to do an operation before such as may come. [Applause].

DR. BRUSH. Mr. President: Both Dr. Reed and Dr. Skene promised to send their papers here, as neither of them could be present, that we might hear both sides of the case. Dr. Reed, as some may know, made some remarks not entirely complimentary to the Association during the meeting of the American Medical Association in this city last year. Dr. Skene has been for many years the gynæcologist to the Kings County Asylum at Flatbush. Both of these gentlemen kindly consented to contribute papers to this discussion and both promised to send me the papers. Up to this morning at half-past eight o'clock they have not arrived.

[The paper by Dr. SKENE on *The Relations of the Diseases of the Sexual Organs of Women to Insanity and Affections of the Nervous System*, having been subsequently received and read by Dr. BRUSH, is introduced for convenience at this point as part of the discussion.]

I am very sorry indeed that I cannot be present at the meeting of the authorities on diseases of the mind and nervous system and enjoy the advantages of your deliberations, and at the same time make some contribution by way of an expression of my appreciation of the help that I have received from those among you in the way of hints, facts and suggestions that have been of great service to me in my own department of medicine. It would have been a great pleasure to me if I could have related somewhat in detail my methods of observation in the fields that have been open to me in the past for the study of the relations between mental and nervous affections and the sexual organs in disease. I should have liked, also, to have presented certain arguments based upon such data as I have been able to obtain, and the conclusions at which I have arrived. This would have given more weight to what I might set forth, and possibly have given some little more value to what I might say. As it is, I can only state a few facts, or what I believe to be facts, on the subject, without much, if any, comment. Perhaps it will be better for science that I am thus limited for time, for if I had a chance to argue my case at length I might lead you to accept some views that are still crude or inaccurate, whereas if I simply state opinions formed from my own observation you will feel it more convenient or easy to accept or reject them according as they agree or disagree with opinions formed from your own observations and study. This will, no doubt, be an advantage, but, on the other hand, the brief statements which I shall here put down will, I fear, read more like an index of a book, with here and there a few explanatory remarks, and will therefore be very uninteresting reading and not at all attractive to listen to. But if any of these facts are received and adopted by you I shall know that it is owing to the value of the truth conveyed and not to the style in which they are presented.

First, permit me to repeat a statement that I made long ago, namely, that diseases of the sexual organs in women, while they give rise to a great variety of nervous disturbances, do not by any means cause insanity so often as gynæcologists have believed and taught in their writings. Diseases of the sexual organs rarely cause insanity, comparatively speaking, unless there is a predisposition to insanity. This is evident when we consider that there are so many cases of diseases of the sexual organs, and consequently nervous affections, among women compared with the number of cases of insanity among the same class, and the fact that the cases of insanity among women who are known to have had or do have some uterine or ovarian disease, have in the great majority of cases a neurotic history which shows a predisposition to insanity. Sexual emotions, or perhaps I might more correctly say derangements of the emotions, which have apparently a sexual basis or genesis, are a frequent cause of insanity, and that too where the sexual organs are entirely free from disease. I am led to make this statement because I have observed the tendency of gynæcologists to attribute emotional derangements of this character to some disease of the sexual organs, but after a careful examination of a large number of such cases I have found the sexual organs normal in the vast majority, and hence fully believe that the trouble is entirely central, not peripheral. Hence I feel quite convinced that acute or chronic emotional derangements from thwarted affections, uncongenial companionship, maternal longings in sterile women, and the like, are more potent causes of insanity and more active than any of the non-surgical diseases of the ovaries or uterus. That diseases of the sexual organs are occasionally found in emotionally deranged women is true, and they are often, indeed generally, supposed to be the cause of the mental disturbance, but a careful investigation of such cases has satisfied me that that is not the rule.

Closely related to this statement is the fact that perverted innervation of the sexual organs causes marked reflex nervous disturbances and insanity as often or perhaps oftener than organic diseases of the sexual organs. This is shown by the fact that young women when given to excesses for a time and who reform by moral suasion or compulsion suffer in a most marked degree, and occasionally become insane. The change from excess to total abstinence causes so much of a revolution that it sometimes overwhelms the mind. The same conditions are observed in young widows. I am sure that you will find in your own experience sufficient evidence of the facts when you recall the large percentage of these classes found among your insane patients. It may appear strange that those who continue in excessive indulgence of the sexual function are more likely to escape insanity than those who reform, either from choice or force of circumstances, but such appears to be the fact.

Imperfect development of the sexual organs in such form or degree as to cause the non-establishment of the menstrual function, or a marked imperfection of that function, invariably causes marked derangements of the nervous system, and in some cases insanity. The degree of mental and nervous disturbances arising from this cause is modified by the general organization of the patients. Phlegmatic girls, as a rule, suffer from deranged nutrition at puberty, and the mind is often impaired or sluggish if not deranged. Those of a nervous temperament and having an inherent tendency to mental disorders often become insane.

Much might be said regarding the different forms of imperfect development and their influence on the brain and nervous system, but it may suffice to say that in this respect, as in all others, diseases or imperfections of the ovaries are far more pronounced in their influence upon the brain and nervous system than diseases of the uterus. If the ovaries are rudimentary or absent the effect is to modify the whole organization, but not to produce active brain or nervous diseases. If, on the other hand, the ovaries are normal and there is some imperfection of the uterus so that menstruation is imperfect or absent, there is, first, marked derangement of general nutrition and then ovarian congestion, perhaps inflammation, and the reflex nervous disturbances become marked, and finally insanity may ensue.

The causative relations of child-bearing and nursing to nervous and mental diseases is well marked and worthy of attention. I exclude from this puerperal insanity, which has attracted more attention than any other branch of the subject now under discussion, and hence need not be dwelt upon. The profound and general asthenia which so often comes from frequent child-bearing and prolonged lactation is the chief condition which leads to insanity. The clinical history of this condition is familiar to all who have given any attention to obstetrics and neurology, and I need say nothing more than that in connection with the symptoms of neurasthenia, the patient first becomes alarmed about her peculiar, strange feelings in her head and is at times emotional, and if these conditions be not promptly relieved the mind gives way. Injuries, such as lacerations, not immediately repaired, have a certain influence, but rarely do more than act as a part in connection with anæmia and neurasthenia in causing insanity. I believe that gynæcologists are responsible for promulgating rather misleading opinions regarding those injuries incident to parturition. It has been claimed by many of them that they are important causes of insanity. In my observation I am quite satisfied that while they in time, especially after the healing of those injuries, with the development of scar tissue, that are exceedingly painful and annoying, give rise to a great variety of nervous disturbances, I have rarely seen a case of insanity that could be traced to those injuries. I have recently seen a case which illustrates this point remarkably well. Some years ago I saw a young woman in a lunatic asylum who went insane several months after the birth of her first child. Her labor was severe and she had post-partum hemorrhage. The doctors who committed her found a slight laceration of the cervix uteri and put that down as the cause of her insanity. When my attention was called to her I made quite a positive statement that the condition of her sexual organs had nothing to do with her mental state, that it was wholly due to her anæmia and nervous exhaustion, and that as soon as her general health was improved her insanity would probably disappear. She called to see me a few weeks ago and reminded me of the statement I made twelve years ago regarding the cause of her mental afflictions, and also gave me assurance that she recovered in less than a year, and was dismissed from the asylum and had remained perfectly well ever since.

The menopause has considerable to do in causing insanity, if we may judge from the fact that a considerable number of women become insane at this period of life. This subject is of special interest at the present day, as it has

a very decided bearing upon the question of producing premature menopause by removal of the ovaries. This will be referred to further on, but in passing I may say that I have been somewhat surprised at some of our surgeons who acknowledge that the menopause is a period dangerous to the mental health of women, and yet do not hesitate to produce a premature menopause, which in itself is unnatural, and hence far more likely, as the facts show, to produce insanity. Granting that the normal menopause has a tendency to cause mental derangement, the question is, how does this change in the functional life of women bring about mental affections? It has appeared to me that it does so, first, by causing certain derangements of general nutrition and especially of the nervous system. I have observed that there are two classes of patients who suffer at the menopause, first those that are weak, spare of habit and of nervous temperament, these at the menopause generally suffer from malnutrition and neurasthenia; and the second class, those that are fat and suffer from excrementitious plethora, and perhaps I might say that they have lithæmia, though I am not sure that that condition covers the whole ground. I think that both classes are liable to insanity, perhaps the first class the more so. Neither of them is at all likely to become insane if they are properly managed and their general constitutional conditions incident to the menopause are properly relieved by appropriate treatment. I believe that all cases can be saved with proper care, excepting such as have some inherent or constitutional predisposition to insanity. Disastrous results are, I believe, most liable to occur at the menopause when the cases are neglected. To this I regret to say medical men pay but little attention to the general disturbances which occur among women who are in the neighborhood of forty-five years of age, but simply tell them that all their symptoms are due to "change of life," and that they will be all right by and by. I might be pardoned then for saying that failure to properly manage cases at the menopause is far more likely to cause insanity than anything inherent in the change itself.

Very closely allied to this subject is that of removal of the ovaries any time between puberty and thirty-five years of age or upwards. This operation, as a rule, produces a premature menopause, which produces generally a far more marked lowering of the activity of body and mind than the menopause at the natural period of life, and hence the premature menopause is a far more important cause of insanity than when it comes at the appropriate time. There is an exception to this rule which ought to be mentioned, and that is when the ovaries are markedly diseased and organically destroyed, and have been so for some time, their removal is not usually followed by such untoward effects upon the general system, and especially the nervous system. Theoretically this may be accounted for on the ground that the slow destructive action of the ovaries prepares the organization as it were for the menopause, and at the same time occupies the nervous system with the disturbances which come from diseased ovaries, and hence their removal is a relief to the nervous system, whereas the removal of the normal ovaries is, figuratively speaking, an outrage to the nervous system, which often overwhelms it.

A very important chapter might be written on the subject diagnosis. When we find diseases or derangements of the nervous and sexual systems occurring together, which holds the position of causation? That this may be

more clearly understood it is necessary to take it for granted that while diseases of the sexual organs undoubtedly cause mental and nervous affections, the reverse of this is true. Diseases of the brain and nervous system may in some cases lead to diseases of the sexual organs. It is important then to determine which is the cause and which the effect, and I am sure that I have experienced no little difficulty in arriving at anything like definite conclusions in many of my cases. I am quite sure also that those of you who have to care for the insane must encounter even greater difficulties, because it is almost impossible to investigate the condition of the sexual organs in some of your violently insane patients, and I fear that you are not always able to get clear histories from the relatives of patients, or even the doctors who have had them in charge before committing them to your care. So it amounts to this, that you often have to depend upon the previous history of your cases for this much of your diagnosis, and in many of the cases it is impossible to get any history that is of much value to you in this regard. I am not quite sure that I can give you much aid in this respect, but I may simply tell you how I am able to make a diagnosis, if at all, in those cases that come to me suffering from both mental and nervous affections, as well as uterine and ovarian diseases. I first of all endeavor to determine from the history of the case which came first, the diseases of the sexual organs or of the nervous system. When this is determined I am satisfied that the primary affection is wholly or in part responsible for that which followed it. If I find a history of some affection of the sexual organs that has existed for a long time, and subsequently some nervous or mental affection has followed, I am willing to attribute to the disease of longest standing the affection or affections which followed. On the other hand, if I find that a patient has suffered from some mental or nervous disturbance, with no evidence of any uterine disease having preceded the onset of this, but during the course of the nervous trouble some uterine or ovarian disease has developed, I attribute the disease of the sexual system to that of the mind and nervous system. In either of these conditions mentioned I may not be satisfied that the one disease is wholly the cause of the other, but I take it for granted that, if not wholly, it is in part. This method of investigation and mode of reasoning enables me to come to definite conclusions in many cases, but there are others where I am left in doubt. For example, I often see patients who suffer from violent backache or headache, who are sleepless, suffer from indigestion or malnutrition, with all kinds of wandering pains and a list of symptoms that is altogether too long to mention, and who have at times attacks of mental depression which appear to me to be true melancholia, and with this history I find some ovarian or uterine disease, and I am entirely unable to determine which came first or which stands in the causative relation to the other.

Under these circumstances I endeavor to arrive at a diagnosis by relieving as promptly and effectually as I can the disease of the sexual organs, and if the nervous symptoms disappear under this treatment I am then satisfied that the original trouble was in the sexual organs and that the others followed in consequence. If, however, I find that there is no improvement in the condition of the mind and nervous system I am satisfied that the case was one which originally belonged to the neurologist or psychologist, and should be

transferred to the specialist in this department. It will be seen that this is not by any means a very comprehensive way of ascertaining the causative relations of mental and nervous affections and diseases of the sexual organs, but, practically, it enables one to avoid making any very serious mistake; and if the gynæcologists and neurologists would be guided by these two or three simple rules there would be a more complete and better classification of our cases and practice, and you gentlemen would have all the cases that belong to you, and we gynæcologists would have those only that justly belong to us.

The treatment of diseases of the sexual organs, when complicated with insanity, will be more readily comprehended, if I repeat a statement which I first made many years ago, and have repeated often since, namely, many of the uterine and ovarian diseases which precede insanity, and may reasonably be supposed to cause the mental derangement, disappear entirely when insanity is fully established. I have repeatedly found that endometritis, sub-acute ovaritis, catarrhal salpingitis and painful menstruation subside entirely when insanity supervenes. The painful menstruation may continue, but the deranged mind takes no cognizance of it; but in the vast majority of cases amenorrhœa occurs, and so the patient is relieved from that painful function. In fact I believe that all functional affections due to deranged innervation and lesions of circulation (and I might add to that the lower grades of inflammatory action, generally called the sub-acute or chronic) disappear entirely when insanity comes. Organic diseases continue, as a matter of course, but some of them are arrested in their progress and do not act so decidedly in affecting the brain and nervous system, and hence do not to any great extent help to continue the insanity. In this regard it might be said that "one fire burns out another's burning." I have found also that self-abuse, which may have been an important factor in causing insanity, subsides or is given up when the mental derangement is fully established. My observations in this connection have been necessarily very much more limited than yours, and it would be of very great importance to know what the experience of alienists or psychologists has been on this subject.

(Gentlemen, I have been hampered thus far by not knowing exactly how to address you. I know that you are all neurologists, psychologists and alienists—this you must necessarily be in order to fill the positions which you hold—and I want some special name comprehensive enough to express my opinion of you, and I will venture to use the one, "psycho-neurologists," which if you think is entirely misapplied please let it serve my purpose, for you will know now what I mean by it.)

From what I have said in reference to the question of treatment it follows that the gynæcologist's great field of action is to prevent insanity by relieving those diseases and functional derangements which are liable to cause alienation. It is equally clear and definitely settled in my mind that the treatment of the diseases of the pelvic organs among insane women is limited to the cases of organic diseases and local manifestations of specific or venereal diseases.

The management of those cases of insanity occurring at or soon after puberty, associated with some of the menstrual derangements, is nearly always of a general character, that is to say, that the only way to improve or

relieve the deranged menstruation is to first overcome the insanity and improve general nutrition. It is rarely then that in this class of cases gynæcological treatment is called for, in fact it never is unless there is some ascertained disease or malformation of the sexual organs. The diseases and injuries that occur during child-bearing, such as subinvolution, lacerations and displacements, require special treatment. I have, I believe, seen general benefit derived from the relief of those affections of the pelvic organs in insane women. Just in this connection I may bring up an old subject, and that is the necessity for the use of anæsthetics in the examination and treatment of diseases of the pelvic organs in insane women. It is now a number of years since I first introduced the use of nitrous oxide gas as an anæsthetic in the practice of gynæcologists among the insane, and certainly in this case "necessity was the mother of invention," for I found that the practice was almost an impossibility without an anæsthetic, and ether and chloroform were so difficult to use, and so dangerous, that the gas was found to be an absolute necessity. Of course there are many insane women that can be examined and treated by the gynæcologists without an anæsthetic, but there are many others, especially those violently insane, who are utterly unmanageable, and in all such the nitrous oxide is a great help.

I might say a word about operating for the restoration or relief of injuries of the pelvic floor and uterus. I have found that when these operations could be performed and good results were obtained, general improvement in the mental state was observed in a few. In a larger number perhaps no improvement was noticed. I have found it rather practical to restore the pelvic floor when injured, because in the after treatment some of the patients could not be controlled sufficiently to secure good results. With lacerations of the cervix uteri it was otherwise. Good results could nearly always be obtained, because absolute rest was not an essential. I have seen quite a few cases of hemorrhage due to fungosities in the uterine cavity. Under the nitrous oxide gas I have obtained good results, both local and general; quite a number of the patients that I recall improved mentally in an unmistakable way.

In the management of insane patients at the menopause there are but few cases that require gynæcological treatment. Those that become insane at this period of life are, as a rule, free from any active diseases of the sexual organs, and therefore the management of the cases rests with the neuro-psychologists. There are many cases that have important diseases of the sexual organs about the time of the menopause, but such cases usually come under the observation of the gynæcologist and obtain relief, so that the vast majority of those who have to be placed in asylums for the insane require little if anything at the hands of the gynæcologist.

A few words may be added on the subject of removal of the ovaries, and the uterus also, and the effect which follows, especially the removal of the ovaries, both in relation to the cause and cure of insanity. We have in late years gained a great deal of experience on this subject, and yet much of the knowledge that we have obtained remains to be classified and more carefully weighed by unbiassed judges, before it can be made available in guiding practice. One or two things seem to be pretty definitely settled, first, that in all cases of ovarian tumors the mental welfare of such patients is conserved

by removing the organ diseased. In case that both ovaries are removed in early life for such organic diseases a small percentage become insane. The same is true in regard to hysterectomy for uterine fibroids and cancer. This is to be expected, when the fact is recalled that the sexual organs are essential to the welfare and health of women. If we admit that disease of the sexual organs may cause insanity the removal of these would be likely to have a marked effect. This fact of insanity following in some cases should not deter the surgeon from operating because the disease is fatal in its tendencies; but in regard to hysterectomy it should have great weight in keeping the surgeon from removing the uterus, unless it is absolutely necessary, and this is very seldom the case. In this age of aggressive surgery operators have been led to remove the ovaries in the hope of relieving a variety of mental and nervous affections for the relief of other diseases like uterine fibromata, and so on. It is quite evident, at the present time, however, that about as many women go mad because of the ovaries having been removed as there are who are cured of reflex mental and nervous diseases by their removal. It is well understood now that epilepsy is not relieved by removal of the ovaries. It is also true that the removal of the ovaries for reflex mental and nervous affections fails to cure in many cases, and while it may give relief from the suffering present, as in cases of hystero-epilepsy, the patients are quite liable to become insane or to suffer from a variety of nervous affections, which is seldom much of an improvement upon the original state for which the ovaries were removed.

Dr. Stone, Washington, D. C. I have here a little paper that I read at the American Medical Association last year, and which was not intended to call out anything of the nature that Dr. Reed seemed already loaded to discharge. And those of you who may have honored me so far as to read this paper will remember that inquiries were sent to the superintendents of very many asylums, very much like my friend Dr. Rohé has done. And I begin to think they must be a very persecuted set, in view of the anxious inquiries in regard to these important questions. I trust they have, however, learned to regard these inquiries in their true light, and I think they have become quite reconciled to them. I received answers from about fifty doctors, and I see Dr. Rohé has through your Association very many more, and am very glad that it is so.

I regret the absence of Dr. Kelly, who has had very much more operative experience than myself. I wish merely to refer to these papers, read last year at Nashville, Tenn., and before the American Medical Association in this city, called "Psychological Results of Gynecological Operations," and "Can the Gynecologist Aid the Alienist," &c. Of course, I don't want to go over that ground. These papers contain a summary of my experience and what I could cull from medical journals, and especially from association with gynecologists who are doing this work. I would like briefly to state a few cases having occurred during my experience in the last year. The rest would be a repetition.

The most recent case was a negro woman sent to the hospital with fibroid tumor. The question being in regard to results of operations, I shall confine myself at present to this. The patient when brought to the hospital appeared to be a

respectable colored woman, about half white. And, by the way, I don't know whether Dr. Rohé has observed it or not, the great difference in regard to the people he has operated upon; I find, strangely enough, that in operations mulattoes don't bear surgery well, and nurses are strongly opposed to the performance of operations upon them, giving as a reason that they require "more work and give a great deal more trouble, and they are apt to die." This mulatto woman came from Alexandria, Va., and, as I said, with fibroid tumor. She had previously been in a hospital where they thought she had a pregnacy of about six months. She had a temperature of 103° to 105°, with some slight rigors. She was for weeks under treatment of various kinds, on the supposition that she had malaria, the real disease not being suspected. At the time of the operation, about six weeks ago, the abdomen was opened, and I at once found that it was impossible to remove the tumor. It had spread out until it filled the pelvic cavity, pushing the broad and lateral ligaments upwards, unfolding them, thus leaving very little room for the bladder and rectum. The Fallopian tubes had become as large as (to use an ordinary expression) a sausage or a sweet potato. The uterus proper had degenerated, and it required a very difficult and dangerous operation to extirpate these pus sacs so that there should be no further menstruation. When the patient rallied from the chloroform she was quite excited. The next day I saw when I went into her room that she was partly Indian. It seemed to me, under the circumstances, very strange, as this fact had not occurred to me until then. I did not suspect that she had any Indian blood. But the next morning the shock following the operation revealed the fact. On the second day after the operation she had quite violent mania. The drainage tube had to be removed, and she had to be tied down in bed. This mania lasted six days, requiring large doses of chloral, codeine and hypodermics of hyoscine. Finally she was entirely relieved of the mania. She stayed in the hospital nearly six weeks before she went home. During the entire time she had this appearance of being partly Indian, which afterwards proved to be a fact. Now in this, and in nearly all other cases, I have found if there is any development of insanity after operation, there has been previous history of insanity. I have challenged my friends, the gynecologists, to refute this. But I do not like to make any such challenge here where there are so many having had more experience than myself. But I have always found a history of heredity where insanity has developed after surgical operations, or there has been previous experience of it, and some possible cause in that operation for its development.

Now in regard to another case. I had a case of simple oöphorectomy, done by the written advice of the physician who had charge of the patient for years. She had been "dilated," "curetted," and had been in an asylum, not as an insane person, but so that she could have moral restraint. Her ovaries presented the appearance of tuberculous disease and very adherent, but they were not enlarged. She got along beautifully, until the third or fourth day she developed mania, which continued a week. She remained perfectly well for some time, and (except the annoyance of paying her bills) appeared to be entirely without mental disturbance for six months, then developed insomnia, during which time she committed suicide.

Another patient had oöphorectomy because of long standing, hystero-epilepsy, and I am glad to tell you, gentlemen, that it is a perfect cure, one of the two I have performed.

Another case I have to offer, which is entirely out of my line. I one time possessed a very fine stallion that had developed very peculiar attacks which I called epilepsy. He would fall not all the way down, but drop upon his knees with a violent tremor over his entire frame, lasting for quite awhile, (a few minutes), and, of course, his usefulness at once ceased. A great many veterinarians and others urged that he be castrated, and this was done without any benefit. He was perfectly well after that, except that when he would have these attacks they would temporarily impair his usefulness. But, so far as castration was concerned, it had no effect whatever.

Now, in the main, gentlemen, I wanted to say for the gynecologists that we have all gone through a vast field of experience during the last fifteen or twenty years, and we, the younger men, I think ought to profit by the investigations of the men who have gone before us. Since Dr. Battey's day, oöphorectomies are not now being done, except for disease. Within the last year I have seen not one removal of healthy ovaries. For myself, I never operate, except where I find disease.

In these cases I get grand results, and will get them nearly every time. I feel very sure that if injury, such as would be caused by a hypodermic needle, may produce tetanus, insanity may be caused also by a matter equally trifling. And in the case of diseases of women particularly, insanity may occur, because their minds are very much agitated, and they are deeply concerned about these organs. I think surely that a great deal of insanity is due to disease of the female sexual organs. So far as treatment is concerned, I agree with a great many of my friends who find that surgery is beneficial only in actual demonstrable disease.

THE PRESIDENT. The subject of discussion is now thrown open. If any member of the Association or any person present has any remarks to make we would be glad to hear them.

DR. CHAPIN. I have no surgical experience in connection with this subject to present. I have, however, been an overseer of a few results. I recall two cases where the ovaries were removed to relieve a condition of insanity, but no improvement resulted. In two other cases where similar operations were performed the mental condition was unfavorably affected—the patients forming delusions about the operation. I have knowledge of three cases where the operation was advised by high authority, but was not performed. They were cases of insanity of a not unusual type, and the operation was suggested for relief of the mental disorder. In these cases recovery took place without an operation, and would undoubtedly have occurred if the operation had been performed and the patient had survived. The thought occurs that there may here be a source of error in making statistics of operations with favorable results, and the question arises how many of those cases where an operation had been preformed and recovery reported would have recovered without an operation with all of its risks.

DR. BUCKE. I would like to mention one case, and the only one of any note with anything special about it, that has come under my observation, and it

is in some respects a rather singular and rather a striking case, that of a young married woman, an epileptic, named R. W. She was in my hospital and had been there for months, but before she came to the hospital she was operated upon; the ovaries were removed for the epilepsy without any benefit. But the husband was not satisfied. He still thought, and some of his friends told him, that the operation had not been thorough and complete, and probably if it were done over again—if it was made more complete in some way, that the patient would perhaps be benefited. After she had been in the hospital some months, and this had been talked about a great deal, I did not advise the operation, but I did not dissuade him from it, I put him in the way of obtaining the services of a first rate operator, a friend of mine in Montreal, a Dr. Trenholme, who is now dead. The result of it was that Dr. Trenholme came up to the asylum, at London, to operate. He opened the abdomen and he found that the tubes had been left, and that the tubes were diseased. He found they were occluded. His first idea was to remove the tubes, but, upon examining the uterus he found that it was diseased, that it was sclerosed, and the end of it was that he performed hysterectomy. He removed the whole uterus. There was no doubt about the disease of the uterus; its cavity was absolutely obliterated, and the walls of the uterus were very much sclerosed. The result of the operation was peculiar, that is the reason I speak of the case here. This woman had had epilepsy, as I say, for a number of years. The theory was that the epilepsy was due to the disease which really existed. The disease was removed, at the expense of a large operation certainly, but the disease was removed. The wound healed by first intention, and in three days' time the woman was well, as far as the wound was concerned. She had epileptic fits almost from the moment that she was operated upon, that is to say, she had fits within a few hours after the operation, and had several fits a day immediately following. And then, (I am not sure as to the exact time), but within five or six days after the operation she died from epilepsy. She died from a series of fits, the disease which was supposed to have caused the epilepsy having been entirely removed and the wound healing.

DR. GODDING. Did you secure an autopsy?

DR. BUCKE. I don't think any autopsy was made, it was some years ago.

DR. GORTON. I would like to ask Dr. Bucke if there was any renal complication possible in the case?

DR. BUCKE. I don't think there was; I am confident there was not. The patient was a healthy young woman.

DR. HUGHES. I would like to report two cases in the line of the discussion of the afternoon.

I was called in to see a patient of a friend of mine, who had performed the operation of hysterectomy, three weeks ago yesterday, upon a young mulatto woman. She made a fairly good recovery, probably a little slow, as he thought, and on last Sunday night she developed some mild symptoms that the nurse giving him the report later in the evening thought might be delirium, the result of temperature, which had been up to 102 degrees; but with a sponging the temperature went to normal. But the condition continued and she went into a violent attack of mania, tearing off her dresses and tearing her hair, so that it became necessary to place her in restraint. In

spite of proper remedies used, this condition continued, and when I saw her last at three o'clock yesterday afternoon she had violent delirious mania and is probably by this time dead, as death seemed imminent.

[August 19th, 1892. Patient subsequently improved physically, but is now in a hospital for the insane suffering from mania.]

I would like to report another case also in the line of this afternoon's discussion, that of a young woman brought to the hospital with which I am connected a little over a year ago. At the age of sixteen (she was twenty-six when admitted) the menstrual epoch began. At the age of twenty-two it ceased and for six months after it ceased she showed no mental symptoms of any kind, no change of character; nothing was noticed except a little uneasiness on her part in conversation with members of her family, and particularly with her mother, because she did not menstruate regularly. A year after she developed an attack of mania which lasted nearly a week. After she had been admitted to the hospital it was learned that these attacks of mania had occurred regularly every twenty-eight days up to the time of her admission, a little over a year ago. She was brought to the hospital on the certificate of two physicians with the hope that an operation might be done, as they supposed she had some ovarian disease. We watched the case carefully for six months, and as her general health did not seem to deteriorate, we were without settled opinions in regard to an operation. But after six periods of twenty-eight days, with an attack of mania each time, or six attacks of mania, and in the intervals, lucid intervals, so that she was able to go into the sewing-room and sew and engage in useful employment, something as she had been before admission, she was operated upon and found to have cystic ovaries. These were removed. The operation was a success so far as the operation was concerned. Healing was by first intention, no rise of temperature at any time beyond 99 degrees, and the first twenty-eight days coming afterwards there was no maniacal attack, but she went into a condition that has gradually developed into dementia, so that to-day she is a case of dementia, unable to take care of herself or to do anything whatever.

[August 19th, 1892. Her mental condition is still unchanged.]

Dr. Murphy. To corroborate the results obtained in the cases reported by Dr. Blumer, I will report one of epilepsy trephined in 1881 by the late Dr. A. M. Fauntleroy of Staunton, Va., while I was an assistant physician at the asylum there. I do not remember much about the case except there was a depression of the skull I think on the parietal bone. A button of bone including the depression was removed and the internal table found intact.

Very shortly after the operation was done there was a change in the administration, but I understood the improvement begun before we left continued, so much so that the doctor's successor had the man discharged as recovered. He went home and very soon after getting there he killed his wife and attempted to kill two of his children. He was returned to the asylum and I think is there now. The last time I was in Staunton I saw him. It seems that the immediate result of the operation was an improvement and afterwards he became worse. He was never known before that time to have made an attempt at violence.

Dr. Charles G. Hill. It is well known among those who are familiar

with asylum practice that insanity is very frequently the result of traumatism or acute febrile or exhaustive diseases. But it is equally well known that cases of insanity often recover from the same causes. Two or three years ago a paper was read by a member of this body setting forth numerous instances in which accidental injuries to the head had resulted in recovery from insanity.

I recall several cases in which an intercurrent disease cured the mental trouble. A girl who had been in our asylum six or eight years had according to my judgment passed the boundary line between chronic mania and dementia. She was seized with a somewhat severe attack of acute gastritis, became thoroughly prostrated and it seemed that she would die. Her friends were sent for, and while they watched around her bedside a change took place for the better. As the gastritis subsided her mind improved and they had the gratification of taking her home entirely relieved of her mental alienation. That was four or five years ago and her trouble has never returned.

I recall another instance of more recent date in a young woman whose mother and an older sister had died in our institution, and when she herself became insane at the age of thirty-five or forty, suffering from a very profound attack of melancholia, it seemed, and I so stated to her friends, that her condition was a hopeless one. Soon after her admission to the institution she was taken with a severe diarrhœa and became very much emaciated. When she recovered from her diarrhœa, her mental symptoms disappeared and after a few months she was discharged as cured.

It is a serious question as to whether the frequent cures attributed to special surgical operations would not have occurred through the intervention of diseases or accidental traumatisms that have the same general effect upon the system. Such experiments might be made in a much less serious manner than by removing the ovaries and the uterine appendages, unless there should be some good reason for the operation. I believe that where there is an unmistakable indication for an operation it should be performed. I recall two cases of operation for epilepsy, both of which were successful. The last one was two years ago, and the epileptic seizures have never returned. One of these was a case in which a man sustained a fracture of the skull in a mill explosion. Some few weeks afterwards epilepsy set in and continued a year or two until the operation was performed, and a brier-like projection of bone removed, which was pointing into the dura-mater in the left frontal region. In this case a perfect recovery was the result.

In another case the patient had been injured in a skating rink, his skull being fractured in the frontal region. Dr. Agnew had operated upon him by removing a button of bone, but was not successful. The epilepsy continued, and about a year afterward in our hospital another was removed a little to the left of the old operation. It was evident that Dr. Agnew had not exactly struck the right point, as the cicatrix did not correspond to the depression of bone.

In this operation we struck the apex of the funnel and removed a piece of bone that was pressing upon the tissues and doing the mischief. This operation was also followed by recovery.

In both these cases the patients were under observation for some time, and

the bromides were very vigorously pushed for several months succeeding the operation.

Dr. GODDING. Mr. President: I am loth to cut off any debate on the paper, but it has been suggested that, as Dr. Bucke has a paper upon "The Causes of Insanity" and will not be able to be with us at the time the paper should be read, namely, Friday, the paper be read by him now.

The PRESIDENT. Unless some one wishes to speak, we will take up the paper.

Dr. BRUSH. Before Dr. Bucke reads his paper, I desire to introduce Dr. Morris, one of the State Commissioners in Lunacy of Maryland.

Dr. PILGRIM. I desire to introduce Dr. Welles, a trustee of the Willard State Hospital.

Dr. MORRIS. I came here as an observer, as a student, and I am very much interested in the discussions this afternoon, especially those on epilepsy, and have been greatly entertained and benefited.

Dr. HURD spoke of the danger of using bi-chloride of mercury as the antiseptic in any operation upon the spinal dura.

Dr. BUCKE, before reading his paper, said: I called my paper "The Cause of Insanity" and then changed it to "The Origin of Insanity,"* which I think is a better name.

At the conclusion of Dr. Bucke's paper, the President said: Gentlemen, you have Dr. Bucke's paper before you for discussion. It certainly has been a very interesting and able paper, and I hope some of you will make some remarks regarding it.

Dr. ATWOOD. Mr. President: I have listened with great pleasure to the reading of Dr. Bucke's paper and cordially endorse in a general way the proposition that insanity may be the result of newly developed mental traits in progressive human beings, but so far as his remarks are applicable in accounting for the extraordinary increase of insanity characterizing the negro race in this country, I dissent from his view, and find other and more satisfactory reasons for the condition mentioned. Prior to the war between the States and, while occupying the relation of slave to the white man, a crazed negro was the rarest bird on earth, there being scarcely one in States largely populated with their kind. At present the asylums of the South teem with them, and the disease in proportion to numerical strength is more frequently developed in the black than in the white race. A superintendent here present from Kentucky says that he has charge of one hundred and fifty. I have surveillance of forty or fifty; and cared for by the city of St. Louis, where I controlled the asylum for five years, there are at least one hundred insane negroes. Daily observation of those constantly in contact with former slaves, so far from demonstrating the development of new and higher traits, is corroborative of the fact that mental as well as moral retrogression characterizes them.

Physically the resemblance of the African to the Simian is more marked than to the Caucasian variety of the human family, as witness the receding forehead, prognathous face, acute facial angle, remarkable occipital development, disproportionate length of limbs, with other striking peculiarities. His mental characteristics correspond with his physical conformation and with a coarse brain, the lightest of all in avordupois; he is distinctively imitative and

*See AMERICAN JOURNAL OF INSANITY, July, 1892.

whatever of mental improvement may have been observed since the establishment of his new relation to society, can safely be attributed to his wonderful capacity for imitating the qualities of the Caucasian. Taking into consideration the preponderance of his animal nature, it is not remarkable that the negro freed from the restraints incident to slavery should copy the vices rather than the virtues of the dominant race, hence his inordinate use of alcoholic drinks, irregular habits, gambling propensities and sexual excesses, which latter characteristic manifesting itself in rape so frequently calls for the administration of lynch law. It may be that after the lapse of millions of years, mentioned as requisite to the development of higher racial mentality, the negro will exemplify the truth of Dr. Bucke's theory, but those who from propinquity are best prepared to reach a correct conclusion will agree with me that so far from the insanity of negroes in this country hinging upon the development of higher mental traits, it is to be attributed to their extraordinary indulgences in the vices of the more highly endowed white man, who naturally opposes more resistance than the weaker-brained African to the frequent causes of mania in either race.

Dr. HURD. I believe that Dr. Bucke's argument still holds good, notwithstanding. As a matter of fact, the breaking down of the colored people at present seems to be largely due to the very immaturity of their faculties. The colored man is in a state of immature development and has not become accustomed to his new surroundings and new environment. I do not see that Dr. Atwood has in any way broken the force of Dr. Bucke's argument.

Mental faculties in process of development, faculties imperfectly developed, and faculties newly developed are very much more liable to go to the wall than faculties which have become established through generations and generations of use. It seems to me that Dr. Atwood has pointed out one of the most remarkable proofs of the correctness of Dr. Bucke's position.

Dr. C. G. HILL. I do not think it consistent with the logic of Dr. Bucke's most interesting and suggestive paper to claim that in the instance of the American negro a new sense or faculty has developed in the quarter of a century since his circumstances and surroundings were radically changed. The trend of the Doctor's remarks would seem to indicate that such a change would require ages and could only be produced by a kind of evolution in which favorable environments were brought to bear upon generation after generation. While it is true that in many instances the negro has made commendable progress in education and civilization, it is unfortunately the case that his vices have grown more rapidly than his virtues, and here lies, I fear, the secret of the remarkable increase of neurotic diseases in the race, within the past quarter of a century. Statistics show too plainly that his neuroses have not increased in proportion to his mental development but his moral deterioration, and from the same source we also learn that the latter has been more pronounced than the former. Even in this great capital of the nation, where he has enjoyed so many advantages and incentives, the criminal statistics of the race present a sad and deplorable spectacle.

A thorough discussion of this question would doubtless afford a valuable contribution to psychiatry. Dr. Bucke deserves the thanks of this Association for his very able and original paper.

Dr. GODDING. I do not rise to discuss the question, but as we are coming on towards six o'clock, and this evening we have another session promptly at eight o'clock, I would move that if further discussion is wanted upon this paper, we lay it upon the table and take up the topic again this evening; in other words, that we adjourn to meet at eight o'clock this evening.

Dr. Godding's motion was seconded by Dr. Hill and carried unanimously. The Association adjourned at 5:30 P. M. until the evening session at eight o'clock.

The Association was called to order at 8 P. M. by the President, Dr. Andrews, who announced that the first paper on the programme would be from Prof. H. H. Donaldson, of Clarke University, on "Results from the study of the brain of Laura Bridgman."

Dr. DONALDSON spoke as follows: Laura Bridgman died in 1889 at the age of sixty years. For more than fifty years she had been an inmate of The Perkins Institution for the Blind. Her history was in brief this: She was a normal child until the age of two years, at which time scarlet fever attacked the household and two of her sisters died, and she herself was very ill and after a long sickness and convalescence, which lasted more than two years, finally recovered. It was found at that time that her hearing was entirely destroyed and that sight was entirely gone from the left eye. She could still distinguish between light and darkness with the right eye. As regards the senses of smell and of taste, they were not entirely destroyed, but were so injured as to be almost completely useless. At the age of eight she was taken by Dr. Howe to the Perkins Institution, and there commenced her very remarkable education, which is more or less familiar to us all. She first learned to read by means of the sense of touch, commencing with the names of things, and after a number of years of this practice had acquired so much information that she could converse in the finger alphabet, could read somewhat, and had a very fair vocabulary. At the age of sixteen special instruction was given her and this lasted for four years. During that time she was taught such branches as mental arithmetic, geography and history, together with some other matters to a less extent. At twenty years of age her education was practically stopped from the lack of funds to carry it on by the aid of a special teacher. Consequently her mental improvement stops at about that period and it is an open question whether if she had had further advantages she would have been able to progress within the next few years, during which the normal mind may be considered in a fairly receptive condition.

As to her physical peculiarties, she was a woman about five feet in height, of spare build, and the head was well-shaped. On the intellectual and emotional side, her education amounted, perhaps, to that acquired by a child during the first four or five years of childhood and was in the main very rudimentary. Emotionally she was of an excitable but rather happy temperament, and her instincts, ethical and otherwise, seemed to be of the most correct nature. All her surroundings, of course, tended to introduce a large religious element into her life, and that played an important part in her intellectual activity, especially in her later years. So much for the brief biography of her life.

Although she conversed mainly by means of her fingers, she could yet articulate a list of words amounting to about fifteen in number, and which were names of things. Then there were different sounds which she herself had given to persons and associated with them. They were variable in character, in that she would change the names of the persons from time to time, as her fancy guided her. This would indicate that a capability for vocalizing was present in her. It seems, however, to have been a characteristic of her earlier years.

Now as to the brain itself. The brain of Laura Bridgeman at her death came into the hands of Professor Hall, through whose kindness I was enabled to make an examination of it. This brain when it reached me had had, from the histologist's standpoint, a rather unhappy history. It was, therefore, impossible to do with it a certain number of things which would have been desirable. The examination resolved itself into a physical test rather than a chemical one. Most of the staining processes which can be relied upon to bring out differences of tissues were here, owing to the condition of the tissues, not practicable. It was found upon examination of the brain, before anything was done to it, that its weight was about that of a normal female brain, being a trifle under the average, but still well within the normal limits. The appearance of the nerves was as follows: Those going to the nose were very small, but no smaller than in some of the normal brains with which it has been compared. The optic nerves, especially the left optic, were very small. The auditory nerves were somewhat atrophied, but the atrophy was moderate as compared with that of the optic nerves. In regard to the glosso-pharyngeal nerves or those for the sense of taste, no opinion could be expressed, for they were in too fragmentary condition to be examined. The general appearance of the brain was carefully noted. The points which are of interest to us at this moment, I think, are the following:

[Here the doctor illustrated his remarks with a plaster cast of the brain, pointing out upon it the various locations as he came to them in the course of his description.]

This model exposes to you the left hemisphere. Here on the left side is the speech center, and the surface of the brain was there sunken. It was sunken not only as compared with the normal brain, but as compared with the other side of the same brain. In the region of the first temporal gyrus, the centre for hearing, the gyrus was extremely slender on both sides. In the occipital region, where the centre for vision is located, it was noticed that the occipital lobes were rounded and had lost the pointed character which is usually observed in normal brains. Especially on the right side of the brain, the occipital lobe appeared much shrunken and as a result of the shrinkage a certain distortion of surface was caused. One point more relates to the sense of taste and smell, located in all probability in the tip of the temporal lobe. The distance between the tip of the temporal lobe and the frontal end of the brain was much greater than in the normal brain, for the reason that the temporal lobe was less completely developed than in normal brains. The question now arises as to what value can be attached to these peculiarities. Were they peculiarities which existed in the brain before Laura was attacked by the illness or were they something for which the illness was responsible? It seems to me a very fair assumption that the brain at the age of two years

has all its fissures practically complete and that any injury occurring at that time would only affect it so far as its further growth was concerned. We have then looked upon the depression of this portion of the brain (speech centre) as a failure of growth. We have looked upon the slenderness of this gyrus (auditory centre), which is not much wider than in a child two years of age, as a failure to grow. We have looked upon the shortness of the occipital lobes and the shortness of the temporal lobes as a failure to grow. We have in this right hemisphere the fact of failure to grow somewhat complicated by the fact that the arrest is more marked than on the other side and that certain parts had here overgrown those which remained stationary.

Having attended to the superficial peculiarities of the brain, it was decided to measure the extent of the gray matter of the cerebral hemispheres and to get the area of that layer. This has been done by other observers in quite a number of cases. For reasons which would not be worth our while to consider here, hardly any of the results can be said to represent the extent of this area in the normal brain. The measurements which have been made, and accurately made, upon brains shrunken by alcohol, which have, of course, less surface than the fresh brain, have been geometrical measurements, and because of the variations in the size of the brain due to the methods of preservation certain corrections must be applied to the results. In this case geometrical measurements were made. This brain had been swollen by the method of hardening, and consequently it was difficult to compare it with the brains that we had noted in the literature. It was found, however, that if corrections were made, the area of the gray matter in this brain of Laura Bridgman was *in toto* what might be expected in a rather small brain. The measurements showed that there were about 2,000 square centimeters, or to put it in another way, sufficient to form a square which was about nineteen inches on a side. The absolute amount of the gray matter was not so significant for our purposes, and, as we see, was within normal limits. An important relation is that between the sunken and exposed portions of the cortex. It has been found by all observers that if we divide the total area into three parts, one part covers the exposed surface and two parts are in the sunken portion lining the sulci; that is, there is twice as much cortex lining the sulci as upon the smooth superficial surface of the brain. This proportion was maintained in the Bridgman brain with exactness, so that there was no peculiarity here. If we attempt to use this method of cortical extension for purposes of localization, it may be said if we compare the frontal portion of the brain with the caudal portion, making the central fissure the line of division, that upon the left side the frontal portion was the smaller, upon the right side the caudal portion was the smaller. This might be brought into relation with the speech centre located in the frontal region on the left side and on the right side, into relation with the occipital lobe and the centre of vision, connected in this instance with the eye which had been most damaged. The extent of the cortex, however, is not a datum of so much significance when taken by itself. Of course, we wish to know the mass of gray matter; the extent is one factor, the thickness another. It was attempted, therefore, to obtain an average thickness of the cortex for the entire surface of the brain. To do this a number of normal brains were examined and compared with the Bridg-

man brain, thirteen different localities being taken in each hemisphere. The localities were selected for the purpose of bringing out any peculiarities which might exist in the special sense centres and comparing them with other portions of the brain, where it was not expected to find anything very unusual. I may say that the literature contains a number of studies on the average thickness of the cortex, and that in their results these vary much among themselves. Some English observers give as the average thickness about two millimetres; some German observers about 2.9 millimetres; these averages are not reconcilable. They must have depended upon some peculiarity in the method of measuring, which has not been mentioned by the authors. My own observations coincide with those of the German observers, giving the thickness of about 2.9 millimetres. When the Bridgman cortex was compared with the normal cortex in this way, it was found to have but a thickness of 2.6 millimetres; in other words it was thinner by 0.3 of a millimetre over the entire surface of the brain. That would have been interesting in itself, but there were special points which were particularly interesting, namely, those regions of the brain where the sensory centres are located. There the cortex was abnormally and peculiarly thin. I said sensory centres because the cortex in the speech centre was not noticeably thin for this brain. Now, this peculiarity of the cortex at the sensory points on the surface was marked in the occipital region, where the cortex on this right hemisphere associated with the most damaged eye was much thinner than the cortex upon the left hemisphere associated with the right eye, in which a faint degree of vision had persisted up to the eighth year.

Since the last instalment of the description of this brain has been printed, I have further examined this particular region with a view to determining from this brain what the extent of the visual area might be. The observation depended upon the assumption that only the absence of vision was responsible for the thinning of the cortex here; that, therefore, where the two sides in the occipital region were unequal in thickness I could infer the extension of the visual area; as soon as they became equal, the visual area had been overpassed. I found by making this comparison that the visual area included not only from the cuneus and the angular gyrus, but extended down upon the mesal surface of the brain and included the tip of the occipital lobe. That, I think, is perhaps the most important contribution that this brain makes to the question of localization.

The question arose as to why this thinning had occurred. What was the cause of it? The only practicable solution that occurred to me was to determine the normal size of the larger, not the largest, nerve cells of the cortex in the normal specimens and run through the samples of the Bridgman cortex to see how the size of the cells in that baain compared with the size of the cells in the normal ones. Where the cortex was thin, it was found in the Bridgman brain that the cells were also smaller, Therefore, whatever may have been the cause of the non-development of the fibres which have contributed to the thinning of the cortex, one thing is certain, that the cells in this brain were much smaller and less bulky than the cells in the normal brains, with which they had been compared. They would therefore occupy a smaller space and give us the thinner cortex. That, I believe, covers the principal points in the investigation, so far as it has been possible to carry it out.

There are several general statements which can be made with regard to this specimen. In the first place, it is highly remarkable, I think, that the brain should have so well survived; that, despite the injuries which occurred to the sense organs, the brain itself was apparently so little damaged. Laura's condition was that of a person in whom the normal pathways for certain groups of sensations had been closed, and those of others, the senses of taste and smell had been, to say the least, considerably obstructed. She had the sense of touch or the dermal sensations alone to rely upon, and strictly speaking the finger or arm centres alone available for the expression of her sensations. It turns out then that in such a case intellectual activity can persist on the basis of one great group of sensations alone. We have here the dermal sensations alone continuing, but yet we have a very respectable degree of intellectual life and activity, Had, for example, the injury occurred to her two or three years later, the disturbance of the brain would have been much less; had it occurred to her a year earlier the difference would have been greater. The difference in the date of the injury must be considered as perhaps the most important factor in determining the amount of educability which the brain will possess in later life, and in comparing the brains of others with Laura Bridgman's, this factor should ever be considered. The fact of one sense standing alone as the basis of intellectual activity is not, however, so singular a thing as might appear at first sight. Very recently the study of the works of certain philosophical schools has led to the conclusion that one group of writers thought in the terms of vision, others in the terms of other senses. What was not thinkable, in the terms of the sense chosen, was not thinkable for that particular school. Laura Bridgman was a person who was absolutely obliged to carry on her intellectual processes in the terms of one sense, and from what has just been said, it may perhaps be admitted that her claim to be considered less of a curiosity than some people would have her, was perhaps well founded, in that she was not so dissimilar to the rest of us in the specialized manner of her thinking.

Dr. HURD. Mr. President: I move that the thanks of the Association be tendered to Dr. Donaldson for his most interesting and instructive address.

The motion was seconded by Dr. Blackford and unanimously adopted.

Dr. DANIEL CLARK. I would like to ask the doctor if he examined the right frontal region of Laura Bridgman's brain, which is the counterpart of Broca's convolution on the left side. It would be interesting to know if it also showed want of development, because if it was of normal extent, vicariously it should do the work functionally which the Ferrier School claim for the third left frontal convolution.

We know that there is found atrophy of this section without aphasia. It is claimed in such cases that the twin sections in the other hemisphere does the work, or it is done by the subjacent island of Reil. Then it is important to know the condition of the cells, especially the multipolar cells; the shape, the number, the size, the presence or absence or shrinkage of the caudal appendages and the thickness of the cell parieties. In this case, it would not be a pathological condition, but want of development, arrested growth meaning limited mental powers. Often, however, as in this case, the physical inlets and outlets of other senses take on unusual activity and compensate for the weakness of a

fellow member. According to the localization theory as usually propounded, there should have been in this case great development around the fissure of Rolando. It is not said that the brain showed this in this case.

The doctor is entitled to our thanks for what of necessity must be a mere synopsis of what could be said in respect to the clinical and physiological aspects of the case.

Dr. DONALDSON. With regard to the first point, the third or Broca's convolution, there was no marked difference in the thickness of the cortical layer on the two sides of the brain. There was a marked difference in the size of the cells on the two sides of the brain. The left side of the brain contained notably the smaller cells, despite the fact that the cortex was not thin.

Regarding the island of Reil, its area was somewhat smaller on the left side, and the gyri upon it were less clearly marked than upon the right.

As regards the size of the cells and their number; the number of multipolar cells was not only less, but their size was less than in the normal brain. There appeared to be an excess of the so-called granules, and the inference was that these granules had been inhibited, and therefore the full number of cells had not arisen in the cortex because their growth was obstructed.

Dr. CLARK. I would inquire in regard to the centres for the arm and leg.

Dr. DONALDSON. The centres for the arm and leg? They show no variation from the normal that could be made a basis of inference, and also the centre for the tactile sensations did not show any hypertrophy that could be made out. I found no hypertrophy anywhere.

Dr. D. CLARK. Thank you.

Dr. RUCKER read a paper on "Mechanical Restraint—A Valuable Aid in the Treatment of the Insane."

The PRESIDENT. Before we enter upon any discussion of this, we will call for the next paper by Dr. Wright, which is substantially upon the same subject.

Dr. WRIGHT read a paper entitled "What is Restraint?"

The Association, on motion of Dr. BLACKFORD, adjourned at 10.30 P. M., until Wednesday morning, May 4th, at 10.30 o'clock.

Wednesday, May 4th, 1892, the Association was called to order at 10.40 A. M., by the President, Dr. Andrews.

The Secretary read the following letter:

"BELLEVUE PLACE, BATAVIA, ILL.,
April 28, 1892.

JOHN CURWEN, M.D.,
Secretary of the Association of Superintendents,
Warren, Pa.

My Dear Doctor—As a member of the Association of Superintendents, it has been my intention to bring before that body at its forthcoming meeting the proposition named below, but, as I find that it will be impossible for me to attend the meeting, I write to ask if you will kindly, as Secretary, present to the Association this letter, that it may take such action in the matter as is thought best.

Over one year since I had published a thousand copy edition of "The Fire Protection of Hospitals for the Insane," a work that I am very desirous of having introduced into every institution in all English-speaking countries, especially in those of this country, not simply as a book for the library, but a manual that can be used as a daily instructor in the organization and drilling of fire brigades. To be of service in this capacity, two or more copies would be required by each institution. The work has been well spoken of by the medical press of this country and of England. As it is my earnest wish to have introduced into hospitals and asylums a more thorough system of fire protection than heretofore in vogue, and as I believe the use of the manual referred to will tend to this end I would make the following proposition:

I will present to the Association of Superintendents of American Institutions for the Insane, for distribution, the entire edition of 990 copies of "The Fire Protection of Hospitals for the Insane," less 70 copies already sold, 100 copies sent to the press and to friends, and 20 copies to be retained by me for my own library and for further distribution amongst friends. In return, I would ask a sum sufficient to cover the actual expense for printing, etc., less the amounts received for copies sold. The totol cost has been $480; received from 70 books $130; leaving a balace of $350.

If the Association cannot accept this proposition I shall be pleased to offer the manual to members of the Association at sixty cents per copy.

Will you kindly give this matter your attention, and bring it before the Association at such a time and in such manner as you may deem proper.

With the best wishes for a successful meeting and regretting my inability to attend, I am, sincerely yours,

L. H. PRINCE.

Dr. CURWEN. The book is here on the table; if any of the gentlemen have not seen it they can examine it for themselves.

Dr. HURD moved that the letter be received and laid upon the table.

Dr. GODDING. I suppose this is not the proper time for bringing up the subject before the Association, but I for one should be sorry to let the offer of Dr. Prince pass by laying it on the table permanently. It seems to me that we all have sufficient apprehension in regard to fire, and many of us have had a sufficiently sad experience in regard to it, to recognize a purpose of this kind. Dr. Prince makes, what seems to me, a very reasonable offer, to furnish at the cost price, so that the Association can distribute to each member a copy of this work. I have seen this book and examined it. It is a practical business manual in regard to means of protection against fire. If the motion simply means to lay it on the table for the time being, I shall not oppose it, but I hope it will be taken up at some future time for action.

The motion was carried.

Dr. BUCKE. I have the honor to report that the Committee on Finance have audited the accounts and find that the Association is indebted to the Treasurer to the amount of $225.53.

The Committee recommend an assessment of five dollars per member.

On motion of Dr. Callender, the report of the Committee was received and adopted.

The PRESIDENT. The report is received and adopted, and a levy of five dollars is made by the adoption of the report.

Dr. GODDING. In behalf of the Committee of Arrangements, I would like to call attention to the importance and propriety of the members present taking an early opportunity to register their names with the Secretary. The programme for this afternoon involves an excursion to the Soldiers' Home. It is important to know how fully the Association intends making that trip.

I may say that the Soldiers' Home grounds are regarded in many respects the pleasantest park in the vicinity of Washington. It has beautiful drives and there have been extensive improvements in the Home. Surgeon Forwood, of the Barnes Hospital, invites us to visit that hospital, and I think the trip will be an enjoyable one.

Dr. Pace has asked me to extend to the Association an invitation to visit the Catholic University, which is near the Soldiers' Home. Dr. Pace would be happy to show us the rooms of the University. It is a new building, recently erected, with very fine accommodations, fine lecture rooms and the general arrangement of University rooms, and I take this opportunity to lay the subject before the Association.

The excursion on Thursday to Marshall Hall depends upon Thursdays being a pleasant day, which I have every reason to hope we shall have. If so, there will be a trip down the river to Marshall Hall. It lies just below Mt. Vernon on the Maryland shore, and Mr. McKibbe, the caterer there, is famous for his planked shad.

Dr. GODDING introduced Dr. Camden, a former Superintendent of the West Virginia Hospital and a member of the Association, and Messrs. W. E. Hadley, A. B. Wells and William Woodyard of West Virginia, the latter a member of the board of trustees of the West Virginia State Hospital.

Dr. HURD from the Committee on Manual Autopsies reported as follows:

To the Association of Medical Superintendents of American Institutions for the Insane: Gentlemen—At the last meeting of the Association in Washington, the Committee was instructed to revise the manuscript of the Manual prepared by Dr. Blackburn, and to add a chapter on "Congenital Brain Defects." After the meeting of the Committee, and a full discussion of the matter, it was finally decided not to be advisable to supply this chapter, as to do so would defer the publication of the Manual indefinitely. A contract was accordingly made with P. Blakiston, Son & Company, of Philadelphia, to publish the Manual in a neat style and to distribute it to the members of the Association at a cost of fifty cents per copy, including postage and wrapping. It was also provided that the copyright should remain in the Association, and that a royalty of ten per cent should be paid upon the Manual to the Association on all sales made at the retail price.

A contract was also made with the same publishers to bring out charts which are to be sold to the members of the Association at cost price. The publication of the Manual and charts has cost the Association $276.18. Of this, the amount expended for charts will be returned, and eventually it is hoped that a regular yearly income will come to the Association from from the royalty upon the book. The Manual has been well received, and the pnblishers inform me that a good sale is confidently anticipated; that in addition to the copies which had been sent to the Association, complimentary copies and so on, one hnndred and fourteen copies had already

been sold to the general trade, and the publishers are confident that a very good demand will spring up for it. They have every reason to anticipate that it will be introduced in Great Britain also as a manual for the use of institutions for the insane.

In conclusion, I would suggest, in behalf of the committee, that the proceeds of the sales of the charts and the royalty upon the Manual be constituted a special fund, to be known as the "publication fund," to be used for similar publications in the future.

Your committee, having fulfilled the duty assigned it, respectfully asks to be discharged.

Very respectfully submitted,

HENRY M. HURD,
In behalf of the committee.

Dr. GODDING. As a member of the committee, and thinking to supplement its report, I have asked Dr. Blackburn to be present and to submit for the inspection of the members, a practical illustration of the use of the charts. Within a fortnight's time, Dr. Blackburn, in making an autopsy, found an interesting brain tumor, and in this connection has made use of these charts. If this is the proper time, I will ask Dr. Blackburn to submit them.

The PRESIDENT. I think it will be better to take some action upon the report of the committee. Then it would be proper after that to take this up.

Dr. BLACKFORD moved that the report of the committee be adopted and the committee discharged.

Dr. BRUSH. Some of us who have been outside of the committee, but have lived in the near vicinity of its members, know something of the labors, anxieties, care and expense to which the committee has been put, and it seems to me entirely unworthy of the Association to allow the report to be received without extending to this committee for its valuable labors the most hearty thanks of the Association, and, with Dr. Blackford's permission, I would suggest, as an addition to the resolution, that the report be adopted with the thanks of the Association to the committee.

Dr. BLACKFORD. I accept the addition.

The motion of Dr. Blackford, with Dr. Brush's addition, was carried.

Dr. CURWEN. There is one point in this report that I would like to speak about. It seems to me to have been overlooked. It reads: "That the proceeds of the sales of the charts and the royalty upon the Manual be constituted a special fund, to be known as the 'publication fund,' to be used for similar publications in the future." How shall that be attended to? Shall the Treasurer make it a separate deposit for that purpose, or how?

Dr. HURD. The only object of the committee in making its suggestion in the report was that this should be considered a separate fund to constitute the nucleus of a publication fund. The details, however, I have not thought out.

Dr. GODDING. If there are no further reports of committees, I wish to introduce Dr. Blackburn, who is, indeed, a member, but perhaps not known to many of you, to explain the use of the charts. I take pleasure in introducing to the Association Dr. Blackburn, who has prepared this work on

autopsies, which I think you will find a very practical work, and the doctor will be glad to show the practical working of the charts.

Dr. BLACKBURN. Mr. President and Gentlemen: I have two cases here which I diagrammed on the charts—one, a case of brain tumor, and the other a case of bullet wound of the brain of twenty years' standing. The charts comprise three sheets—one with the heading of the autopsy record, with some little printing necessary for preliminary data; in addition two other sheets with diagrams of the brain convolutions and sections made through them. These speak for themselves better than I can for them, and I will pass them around.

The other case is a bullet wound received about twenty years ago, and the object of the post-mortem was to locate the ball and find the injury done to the brain. I have diagrammed the course of the bullet and the softness due to the injury. The autopsy notes are not written out, merely the headings, to give the nature of the case. The Manual itself is here; it shows the method of shading, etc. I thank you, gentlemen, for your attention.

The charts were passed around for the inspection of the members.

The PRESIDENT. The next order of business is "Suggestions for the Meeting of 1893." I will call upon Dr. Brush for remarks upon that subject.

Dr. BRUSH. Mr. President: At the first meeting of the Committee of Arrangements held at Washington, at the Government Asylum, the duty was assigned to me, after some conversation informally, of making some suggestions in reference to the meetings of 1893.

As is possibly known to some few members of the Association residing outside of Chicago, there will be in 1893 an Exhibition there celebrating the discovery of America four hundred years ago. It was suggested at the meeting of the committee that a large number of the members of our profession from foreign countries might be present in America during the exhibition, but it was not the thought of the committee to propose to hold an international congress of mental medicine or an international medico-psychological congress, but to suggest that an invitation be extended to such members of foreign medico-psychological societies as might be present in America at the time of our meeting to join us at that meeting as the guests of the Association. The suggestion to me made by the committee, as I understand my instructions, was that I was to throw this out as a suggestion or proposition, and, if favorably received by the Association, it was to carry with it the appointment by the chair, or otherwise, as the Association might suggest, of a committee to extend in behalf of the Association an invitation to these gentlemen. And, if I may be permitted to make a suggestion, we yesterday appointed Dr. Channing, who has just sailed, our delegate to the British Medico-Psychological Association, and it would seem to me very fitting, if such a committee were appointed, that he be made a member of that committee, so that he can at least to one society extend personally our invitation.

I repeat that it is only a suggestion of the Committee of Arrangements; not in any way to force it upon your attention, or to interfere in any way with the work of the Committee on Time and Place of Next Meeting, simply to throw out a few suggestions.

I deem it proper to say that it was not exactly the advice of the present

committee to hold our meeting at or near the place of the exhibition. If we hold such a meeting, we want to hold a meeting full of scientific interest, and those of us who have attended a meeting of this character where there were outside attractions in the way of exhibitions know very well that they become the most prominent, tending to keep members away from the meeting. I remember the meeting of the Association in the city of Philadelphia in 1876. I was not a member of the guild at the time, but I was a looker-on, and I remember that the meeting was not very successful in the way of scientific interest, and that the Centennial attracted many members away from the meeting proper.

We have been requested by the Trustees or Managers of the Asylum at Buffalo to extend to the Association an invitation to meet there. I simply throw this out as a hint as to what may be done. Buffalo is on the way to Chicago, is a beautiful city, and offers all that could be desired in the way of hotels, and its general hospitality is well known.

I move that a committee be appointed by the chair, if it meets the approval of the Association, to extend to the members of foreign medico-psychological societies an invitation, if in this country at the time of our meeting in 1893, to join with us in the discussions which will then be held.

The motion was seconded by Dr. HILL, of Iowa.

Dr. DEWEY. Before that motion is put I would like to bring up one point that may, perhaps, be considered in connection with it.

I understand that the time when the members of foreign scientific bodies, similar in their objects to ours, would be visiting this country would be in the month of August, and I think that an invitation of this kind extended to those foreign bodies would necessarily, if it should be accepted, carry with it the consideration, or at least that we ought to consider whether we ought to meet them, in connection with this matter. The members would need to be satisfied in their own minds as to what time of the year was most convenient to them.

Dr. COWLES. It seems to me that the motion touches upon the single point as to whether or not we shall invite our friends across the water to meet with us. The other matter of time and place will take its own position when that has been determined, and before our meetings are over the committee will have the data to go upon in naming the time.

The motion of Dr. Brush was then carried unanimously.

THE PRESIDENT. Such a committee shall be appointed and the further details, as Dr. Cowles suggests, may be left to the committee on time and place of next meeting. I will appoint such a committee and name them at the next session of this meeting. A committee of three will be sufficient, I suppose; the number was not designated.

Dr. CHAPIN then read a paper, entitled, "General Suggestions; Increased Attention to Acute Cases; The Cultivation of the Hospital Idea," at the close of which remarks were called for.

Dr. BRUSH. It does not seem to me that a paper of this kind should fall to the ground without some discussion. Nor does it seem fitting that a disciple should stand up and say, "I agree with the opinions of my teacher." Of course, that goes without saying. I have sat at the feet of the Philadelphia Gamaliel so long that I naturally have imbibed some of his ideas.

It certainly does seem to me that the direction for improvement in the care of the insane in hospitals throughout the country is positively in the line of more careful, more exact and more persistent attention to the acute and recoverable cases. At the Pennsylvania Hospital for the Insane, we were more or less embarrassed by the congregate building, whereby the patients upon one ward were brought almost directly in contact with those of another; we had no effectual way by means of a hospital ward of entirely separating the chronic from the acute, or the quiet from the noisy or turbulent. At the same time, under Dr. Chapin's direction, we put into practice the use of a receiving ward, to which, so far as possible, modified, of course, for different patients, all acute cases went. We there congregated our best attendants, we there put into practice our best care, and I think if we met with any success at all in regard to the care and treatment of these cases, it was upon that very ward and with those very patients.

Now there is another class which, so far as our statistics are concerned, do not add to our recovery rate, but do, unfortunately, very frequently add to our death rate, a large class which is entitled to as much care and kind nursing as the acute cases I refer to the paralytic and chronic cases. Many of these cases could be made still more comfortable, their lives prolonged, and our duty would be better performed, if we gave to those cases also the care and attention which we give to acute cases. Dr. Chapin suggests that there should be a separate building for these special cases. Hospital care would probably be necessary for five per cent of the cases, and it is possible that about five per cent more could be cared for, and well cared for in a hospital constructed for paretics, paralytics, and to some extent epileptics. I do not mean to trespass upon the time of the Association further, nor do I propose to trespass upon what Dr. Stedman may say on this latter subject. I would not have discussed this paper at all, but I did not want to let it pass without comment or approval. I did not rise even to add anything to what Dr. Chapin has so well said, that would not be possible for me.

Dr. HURD. In listening to Dr. Chapin's paper I was impressed with the fear that, possibly, the scope of it might be misunderstood. As I understand it the paper was not in any way a criticism upon present methods, but simply an endeavor to point out the way in which the work of members of the Association could be still further improved I think that physicians who are in general hospitals, as well as alienists abroad, do not understand fully the difficulties with which we have been obliged constantly to contend in this country in the care of the insane. Until recently there has been scarcely a State in the Union that had sufficient accommodations for the insane. It has been necessary for the superintendents of institutions and those interested in the insane to constantly urge the necessity for additional provision for housing and caring for the insane, and meeting a great and growing evil. Too frequently also from the very urgency of the case it has been impossible for the superintendent to make the provision for the insane which his own judgment told him to be proper. I think the problem has been very much complicated by the fact that the insane originally provided for were the noisy and violent. When the scope of insanity became enlarged, to include not only the vicious, but cases of melancholia and milder forms of mental disease, it was

then found that the provision which had been made for the violent was not the best for the treatment of milder forms of insanity. For this reason it has become necessary to modify our system with the hope of meeting the requirements of different classes of the insane and to separate them from each other by the erection of new buildings.

It is now pretty evident that the movement which originated in England two years ago to establish in every city a hospital for the acute insane will miscarry. I don't think that any one ever had any expectation that it would be practicable to care for the insane in any great numbers upon the lines laid down, for instance, in London. As a matter of fact the insane can only be cared for properly by a person who is constantly upon the ground. It is absolutely out of the question for visiting physicians and eminent neurologists, however eminent they may be in their specialty, to give their personal attention to the details which the necessities of acute cases require. For that reason it already appears evident that the movement to erect special hospitals in cities on the plan of general hospitals, for the care of the insane, will amount to nothing. But it is a duty none the less for the superintendent to make provision for the same class of patients in connection with each hospital for the insane which was contemplated by those who originated this movement. It is no longer possible for us to be content with taking care of the violent classes; we must take care of the treatable and curable classes of the insane; and any institution which fails to do so fails to give that fostering care to the insane for which our institutions were created. I would go a step farther than Dr. Chapin. It seems to me that in addition to the strong sections which he speaks of I would have detached cottages for the treatment of curable cases. I would have an infirmary ward where not alone the helpless and depressed could be cared for, but where convalescents and those requiring the most assiduous nursing and general care could receive it as in a general hospital. And I would also have arrangements made so that individual cases could have separate houses, special nurses and a staff of nurses if necessary.

I have been very much interested in the paper and I am sure it will stimulate all to do better work for the care of the insane.

Dr. ROBÉ. To one coming from a general hospital recently into the management of an hospital for the insane, the paper of Dr. Chapin has been not only interesting, but instructive and stimulating. I do not feel that I am competent, or that if I were competent or regarded myself competent, that it would be good taste to make any criticisms upon the conduct of insane hospitals at present. I think Dr. Chapin will agree, and perhaps Dr. Hurd also, that the progress that has been made, while some has been made, has not been sufficient. Take a superintendent or a physician of an insane hospital who has been trained in the work, he goes along with certain prejudices and it is very difficult to divest himself of these prejudices; things were done in that way for a good many years by his predecessor and he either lacks courage or energy to make a change. It is pretty hard to break out into new lines as some of the members of this Association have done. Take the other man who comes into the management of an insane hospital from private life, direct from general practice. He comes in with a good deal of timidity. In the first place, as a

general practitioner he has had no experience in the management of, and he is afraid of the insane patient I do not hesitate to say that, because I have been there myself. (Laughter.) Then when he comes into the hospital as officer in charge, as he usually does, he is afraid of his assistant physicians,—afraid of their criticisms. He is still more afraid of the talk of his attendants; he wants to do things just as they have been done, so as to avoid criticism. It may also happen that he does not want to take too much trouble. He reads the Proceedings of this Association and finds that very much attention has been paid to the construction of hospitals, and he thinks that is a very important thing. Another step has been the classification of patients and he thinks that is a very important thing. Then again he finds much discussion in regard to the various details of management; whether it is proper to have one head or several heads of an institution; and he begins to fill himself up with the various knowledge upon these points. He forgets that there is a patient who comes before him for diagnosis, and that there is something still more important than the diagnosis, and that is the patient himself. And so, when the patient comes in, he is sent to the ward where it is apparently easiest to keep him. If he is a case of acute mania, perhaps with a pulse of 120 to 140, he gets something to make him sleep, and an attempt is made to control him in some way. But if this patient comes into a general hospital, or comes into the hands of a doctor in private practice, he would get different treatment altogether. It would not be so important what sort of a room they put him in, but the condition of the patient would demand his attention. While it is quite likely that there is still chance for improvement in hospital construction I believe that there should be more individual care of the patient. This I regard as the keynote of the paper of Dr. Chapin. Individual care and treatment of the patient, regardless of the name of the disease and of other non-essentials, is the one point to which we should give our attention.

Dr. Godding. I feel that I am again laboring under the embarrassment which grows out of my capacity for waiting, to let everything that I was intending to say be said by some brother before me. I cannot let the opportunity pass of expressing my gratification at the very able paper, so full of thought, which has been presented by Dr. Chapin, and which puts me in mind of those old sermons on Sin, which I listened to more formerly than of late years, and which I always associated with my neighbor, where everything that was said, I thought, of course, did not apply to me.

I have been laboring, as you know, for many years in the direction of a departure from the old stereotyped method of constructing hospital buildings, and what Dr. Chapin has said of these different provisions seems to me to outline the direction in which our future progress may be made. Of course, others have outstripped me, but with them, I have waited patiently with each session of Congress, hoping for money to build on the plan of the advanced care of each class of patients. We are just now laboring with Congress for a building for the epileptic class, and it seems to me a very desirable thing; you all know the limitation with which we are treating it.

As to the other plan, it has been admirably outlined by Dr. Hurd. Our hospitals are overcrowded, and we have limited appropriations, by reason of which we pass by this and omit that, while we know they would be most bene-

ficial. I almost envy Dr. Chapin, with his abundant room, that feeling of prosperity that comes with those institutions where the financial consideration is not of the most importance. I have no doubt that in our hospitals whatever can be done in the way of this individualized treatment of the insane will do away with the old stereotyped way of treating by classes and sections. It is time it should vanish away. The provisions which are being made for the acute and active cases, to which Dr. Brush has referred, and the reception ward, which I know we all claim to have, and which, of course, is very imperfectly classified, where a night service can be introduced with a day service. In that respect I may speak from personal experience at St. Elizabeth. We have found great relief in having a night medical officer, so that the continuous twenty-four hours of service of the medical officers should be felt in the treatment of the insane.

I know the lateness of the hour, Mr. President, and that there are other valuable papers in this discussion which has been so ably introduced.

Dr. BLACKFORD next read a paper entitled, "Economy in Hospital Building; Description of New Buildings at Staunton; Economical Use of Patients' Work in Conjunction with the Organized Labor of the Institution." [See AMERICAN JOURNAL OF INSANITY, July, 1892.]

Dr. DEWEY. The establishment of a system of industrial employment among the insane is an enterprise which is fraught with difficulties, as we all realize. The requirements of benefit to the patient, of safety and of economy must be met, and it is not easy to meet them in arranging employment of the ordinary sort for persons of disordered minds. The arrangements must be so made that the employment given will at any rate not be injurious to the patient and, if possible, a benefit. It must also be evident that in placing tools and implements in the hands of the insane there is a good deal of risk to be run, unless it is done with great circumspection; and, finally, it is also very easy to enter upon a system of employment which will cost a great deal more than it will come to. Then the difficulties of furnishing suitable inducements to patients to secure their acquiescence in employment is another difficulty. The insane, in addition to the average amount of laziness which is common to our fallen nature, are still further rendered inactive and impassive by disease, and, besides this, those who are the most intelligent and skilful, and perhaps would be the most useful if they could be employed, are the very ones who are disinclined to exert themselves for the benefit of somebody else. They feel certainly that they are under no obligation to the institution which compels them to remain under its confinement without any reason which they can appreciate, and yet, it is not best to furnish compensation to patients in any but exceptional cases. The rule that I have endeavored to live up to in the establishment of different forms of employment among our patients has been that "all should do something and that no one should do too much." Of course there are a few exceptions to the rule that all should do something. There are a few who cannot be employed in any way, but as a general rule I believe that it is a safe and fruitful one to go by.

In the year 1885 an appropriation was asked from the Legislature of Illinois to build a shop building at Kankakee and this appropriation was granted, and a building erected which, it was supposed at the time, would be sufficient

for the purposes of the institution in employing its patients. When the building was ready we began in a moderate way. I think the first thing that we attempted was the making of brooms, and also started work with one shoemaker. We looked over our lists and found what the previous occupations of the patients had been, and patients were selected who were familiar with different trades and handicrafts, and efforts made to engage them in such work as we could give them, such as they had been previously acquainted with. An effort was also made to teach those who had never been engaged in any employment of the kind, some of the simpler forms of work, and the broom-maker taught a great many others that employment. It was not long before we had him at work making all our brooms, and to-day we make all that we use and sell four or five hundred dollars' worth each year.

We make all baskets which we use, and we have four or five shoemakers at work, two tinners, and there are two engaged in tailoring: five or six are employed in making rag carpet, as many more in making woolen rugs, two are employed in the little printing office which we have established for doing our simple work of that kind. There are six or seven employed in upholstering, and all of the time one, and some of the time two, in making frames for pictures. This latter has been a particularly valuable industry to us, enabling us to furnish the walls of the institution quite readily with prints of an ordinary cost, very well mounted, at probably one-third the expense that would usually be required, as we make our own frames and mats, and find it very easy to do so I do not think this includes all of the industries, but it is all that occur to me at present. In the meantime our percentage of employment has increased from about 65, as I believe when we began, to between 70 and and 75 per cent. 73 per cent. of the total number of patients are usefully employed on an average. That is to say 73 out of every 100 perform every day as much as two hours' labor; we don't call it a full day's work. There are many who do work eight and even ten hours, but the number named work at least two hours and many considerably more.

The time is passing rapidly, and I will not detain you for any extensive elaboration of this subject. I may further add in reference to what I said about our shop building that at the last session of the Legislature it was found by the committees that our use of the building which we had for the shop had been such as to entitle us to an enlargement, or at least to a new building for that purpose, and an appropriation of $10,000 was given to build a new shop for male patients, leaving the previous building to be used entirely for the female patients. The new building we are just occupying at the present time. It is one hundred feet long, fifty feet wide and has two stories, the upper story being wholly given to patients' work, and one-half of the lower story.

Among the employments I should have spoken of when I enumerated them, is that of wood turning. We have one, and much of the time two patients engaged in wood turning, and two or three carpenters among the patients employed all the time. They are engaged daily in repair work—repairing of furniture—chairs, tables and things of that kind, which require the use of the bench and the turning lathe.

I have here the report of the foreman of the shops for male patients for April 30th. By this report of our patients' employment it will be seen that

we have that building not yet fully equipped, but I will just give you a few of the facts.

At that time (April 30) there were two engaged in broom work, two making baskets, three in chair work, four in making rag carpets, one harness maker, six in making husk mats, four in making woolen rugs, four in shoe repair work. And I may say that in connection with this work there is a profit which is quite respectable, about $50 being charged each month to the counties for repairing of shoes, at the ordinary rate which it would cost if it were done outside, whereas the labor is done entirely by the patients. The one patient, however, in charge of the repair work receives a small sum per month, and we pay a few other patients small amounts; and there are some who receive compensation in the way of a little present at Christmas or New Years, and there are other inducements which I may mention; two I will speak of which I think are the most important ones. One is the privilege of parole. We make it a rule not to give patients the privilege of the grounds, of the parole, unless they employ themselves. Patients who might otherwise be given liberty, if they are not willing to accept this condition, provided they are able to do so, have their parole recalled, and that is one thing that acts as an incentive to the healthy and the capable men, for there is nothing they appreciate more than the privilege of the grounds. Of course there are a few patients whose condition warrants parole without their employing themselves. Another thing is tobacco. It is said in the outside world that "Money makes the mare go;" in the hospital, tobacco has something of the same effect. The privilege of a smoke or a bit of plug tobacco will bring a great many patients to the shop who would otherwise feel disinclined to go. But, of course, it is necessary to guard against the patients being injured by tobacco, and that is carefully looked after so that they will not get an excessive dose. The foreman's report shows further one employed at tailor work on the day mentioned, one tinner, five at upholstering, (three or four at picking hair, one, and sometimes two, in doing the work of upholstering), one at printing, two at picture framing; and other miscellaneous work, two.

The benefit to the patients in this matter is the most important thing, after all, and I had drawn up here a list of the patients who have recovered, or sufficiently recovered that they could return to the outside world and maintain themselves, as a consequence largely of being given employment of this kind in the shops. All of them were previously regarded as chronic and incurable patients. I will not now take your time to go into the details, but, looking back over the last four years, I find that there were about twenty-five such cases.

I have the summaries and reports of our shop work and of the employment of the whole institution, if any one would feel interested in looking at them.

I have not spoken of the employment of the female patients, because as yet we have scarcely developed any special industries among them, but the same percentage of our female patients are usefully employed (viz., seventy-three per cent) at ordinary domestic duties, and besides a good deal of decorative and fancy work. Knitting socks is another of the chief forms of employment of female patients, but we have as yet had no special work-rooms for the women patients, such as we are now to have.

Dr. DANIEL CLARK. Doctor, you have not mentioned farm work.

Dr. DEWEY. We have between forty and fifty who steadily work on the farm. We have one farm ward, and we have twenty-five patients in that ward who are entirely engaged upon the farm work, besides those who come from other wards. I was only endeavoring to bring out the employment to the industrial trades and occupations.

Dr. D. CLARK. Does that include your dairy work?

Dr. DEWEY. It includes farm work. We have no dairy, *i. e.* butter or cheese making, but we milk 150 cows, using the milk as food. It includes the patients ordinarily employed on the grounds around the building.

We are putting up a group of seven buildings for 300 more patients, the foundations of which, all the excavating and a great deal of the unskilled labor, the patients are engaged upon.

Dr. D. CLARK. Seventy-two per cent includes all kinds of labor?

Dr. DEWEY. Yes, sir; every kind, and in closing my remarks upon this subject, I want to speak of the industry which I saw last March among Dr. Bryce's patients at Tuscaloosa, Ala. Dr. Bryce, we had hoped, would be here to speak on this topic. Many of us are aware that he has been remarkably successful, especially in employing female patients, having reached a percentage of ninety among the female patients. When I went with Dr. Bryce through his wards we found everywhere alike in the quiet and disturbed wards a remarkably uniform industry. The attendants had the patients gathered about them sewing and knitting everywhere, and idleness seemed to be decidedly exceptional. In one large room there were fifty or sixty engaged in carding and spinning cotton, and all seemed far more happy and cheerful for their work. On the day when I was there, the weather was very rainy, and the outside work of the male patients was suspended. Dr. Bryce has several hundred wheel-barrows which give work well adapted to their condition to a majority of his male patients, and an enormous amount of work has been done in this way in filling and grading and terracing about the grounds.

Dr. HURD. Before the discussion begins I wish to say a word and to offer a resolution.

It may be known to the Association that G. P. A. Healy, the artist, presented the Illinois Eastern Hospital a very valuable collection of his paintings, to be used for the entertainment and the recovery of the inmates of that institution. So far as I know, this contribution to the welfare of the insane is the most liberal which has been made by any trust or any person who has not been interested in or specially connected with the treatment of the insane. And it seems to me very appropriate that the following resolution should be adopted:

"Having learned of the gift of a collection of his paintings to one of the institutions of his adopted State by the renowned painter, G. P. A. Healy, the Association desires to record the appreciation which its members feel of his enlightened benevolence, and of the benefits that must accrue to the patients in the hospital from their enjoyment of these works of art. The Association also expresses the hope that this example may foster a similar benevolence on the part of others who are in possession of similar means of benefaction."

The resolution was seconded by Dr. HILL, of Iowa, and unanimously carried.

Dr. CHAPIN. In connection with what Dr. Hurd has stated I would like to mention that the Pennsylvania Hospital for the Insane has received a gift of ten thousand dollars, the interest of which is to be applied toward the encouragement of art work and occupation among women patients. Let us hope such acts may prove suggestive to others.

The PRESIDENT. We should be glad to hear of any other similar good fortune.

Dr. CURWEN. A few weeks ago I received a letter from a gentleman who was the executor of the estate of a lady giving to the hospital at Warren, five thousand dollars, to be used as a means of employment for female patients. (Applause.)

Dr. GODDING. As a statement of donations seems to be in order, I wish to state that a lady of this city has given to the Government Hospital for the Insane, the sum of five thousand dollars, to go to build a cottage for the separate and distinct provision for the insane, no condition being added; but as her daughter is under care with us, the trustees have voted that she shall always have a home with us, provided, of course, that she pays the expense of her support, while she lives. I think it is a most generous donation and worthy of mention with these other cases.

Dr. COWLES. Mr. President and Gentlemen: No one can fail to appreciate the tremendous difficulties and embarrassments, and to regard them with profound sympathy, which our brethren who are engaged in the State care of the insane labor under. In hospitals that care for a different class of patients, we find that poverty, the loss of friends or home, the deprivation of comforts previously enjoyed, make the suffering relatively as great, perhaps so that there is a distinct place for charitable work in such hospitals as the Bloomingdale department of the New York Hospital, the Retreat for the Insane, or the Asylum department of the Massachusetts General Hospital, and the other like institutions. Their field covers the care of patients who can pay five to ten dollars per week, even those at fifteen dollars a week often paying only part of the real cost of their care. In order to give that sort of care which is relatively like the way of life to which they are accustomed, to teachers (men and women), professional men, and people who have been well-to-do, there are special requirements. To give care relatively equal to home care is the problem of the new McLean Asylum that is to be built. The trustees have owned for some years a piece of land, one hundred and seventy-six acres, so situated as to be rather high, two hundred feet above sea level and with sloping sides, directly to the front of which is a southwest view into the valley of the Charles River, with beautiful distant views. Its slopes to the front and either side, with wooded ground rising terrace-like in the rear, are so uneven and irregular as to make it difficult to select sites for buildings; but the sites being once selected, and the buildings adapted to those sites, the irregularity of surface helps to attain the purpose we have in view, which is to build houses for people to live in that shall look like houses detached from one another like ordinary residences. Each house will be different in style, material and mode of construction, so that the result will be a group o

residences like the suburban section of a city, having, so far as possible, every aspect of hospital or asylum eliminated from it. Not only as to appearance is this valuable, but it established the fact that by construction and proper placing of the buildings, the patients in each one may be perfectly free from annoyance from the occupants of any other building. That is the general idea.

These plans represent a group of buildings centrally placed upon one of the upper terraces, showing their separate construction and general grouping, and their connection with each other at a distance of 75 to 250 feet apart by covered ways. These covered ways are to be in appearance like low garden walls five feet high above the ground surface and four feet below it, so that from the outside you see simply ordinary garden walls.

Without stopping to dwell upon the general plan any further than to note the purposes of the buildings, the distinct character of each, the placing of them in an irregular fashion with relation to each other, and the general arrangement, one point is important to be mentioned. This plan seems to go against the long-standing policy of keeping patients well collected together under surveillance of physicians near to the central building, or the placing of physicians in these detached buildings, contrary perhaps to the plan that has recently been devised by Dr. Clouston, in which he treats his excited patients, the new cases of an acute character, who are noisy, dirty and troublesome, close to the central structure where the physicians are. Quite contrary to that, we place the disturbing patients, particularly those of more chronic character, at a distance. In defense of this I have to say that we justify ourselves in this policy because of our confidence in our nurses. We know now that we have trained men and women who are sufficiently trustworthy, experienced and reliable in every way, whom we are not afraid to put in charge, with their assistants, in distant buildings, even a quarter of a mile away in an excited ward, and feel just as safe, as far as their trustworthiness is concerned, as if they were only a hundred feet distant. I think that the taking of that position as regards the service of asylums enables us to add the requirements that patients should not be annoyed one by another, by the violent, the excited or unpleasant cases. In this way the new kind of nursing permits a most desirable improvement in hospital construction. It is purposed, however, to provide a small building called especially "the hospital," for acute and excited cases, and place it near the administration building. Two buildings of the group are now to be built for patients. They are for women, and one will contain about twenty-eight or thirty patients on two floors. It is to placed at a distance of one hundred and seventy feet from the central or administration building, and connected with it by the corridor as described and shown in the ground plan. The corridor touches the back of the building and branches off, so that the building itself stands outside of anything like an enclosure. It seems to us to be most practicable and proper that as these buildings are grouped, enclosing considerable land behind each by the connecting corridors, it may be used as large gardens, which we find to be very useful, with ample garden room outside. We see no objection to large spaces thus enclosed.

The building is so arranged that all the rooms occupied by patients, are ex-

posed to the sun; and upon what is very like a court in the rear are the service rooms. The peculiarity of the building is perhaps this, that there are several ways of entrance; and the rooms are arranged to be used in small groups of three to six patients each,—or one alone may be isolated from all others, and have ingress and egress without being observed by them.

The front elevation shows the entrances, the two story construction after an English style; the endeavor being to give the building a domestic character. It is about 100 feet in length, but it is on the plan of a large residence; and large residences are becoming more common in this country in the last ten or fifteen years than they were formerly. These rooms 10 x 16 and 14 x 16 are for single patients.

We have also to care for patients of the private class, who want more liberal accommodations. This other plan is of a building for eight ladies, each having a suite of rooms with toilet, etc. The peculiarity of the construction is such that there are three distinct entrances and three separate sections of the building with spacious hall and stairways. Each floor can be made quite independently into three distinct divisions, each with one or two suites of rooms. The entrances are so arranged that almost any room can be reached from the general entrance hall without passing the door of another patient's room. These two stories constitute the accommodations for eight patients. This plan of the exterior of the building shows the Colonial style of architecture. In the week of the adoption of the plans of these two buildings, a gift was made to the Trustees of a third one, as a memorial building. By another year we hope that we may have three of our new buildings.

In reference to the special structure called a hospital, we shall provide for that by setting a small building apart from the others, but of easy access by a covered way from the other buildings. The design is that it shall be a building to contain two suites of rooms, and three or four common single rooms; but it is also divided by a separate hall or passage-way or lobby for each suite of rooms: by a thick partition wall through the centre of the whole structure each patient will be so thoroughly separated from all the others that a lady in a state of acute excitement may be carried through the first weeks of her illness in that building without actually knowing that there are any other patients anywhere near or even in the same building. Such a building can be so arranged for six or eight patients, and furnish the temporary place of treatment for acute cases that Dr. Chapin has advocated. There is as much need of separate care for acute cases of mental disease as for the accommodation and care of surgical cases,—as in the modern abdominal ward so-called, with its special operating room such as are now being provided in the best hospitals for surgical diseases.

Dr. Brush. Dr. Lyon, of the Bloomingdale Asylum, has promised the committee through me to bring the plans of the new Bloomingdale Asylum here to me. The plans I do not discover in the room. I move that a time be set apart some time during this meeting for the consideration of those plans.

Dr. Godding. In behalf of Dr. Lyon, I should say that he has been unexpectedly detained, and he sent me a letter last evening saying that he would forward one of their reports and also plans, and gladly send them to any individual member, and I will try and have that report here to-morrow. I

was sorry I could not get it in season to submit it to-day. These plans contain the general outlines of the new Bloomingdale buildings at White Plains, which they are building on the congregate plan, with distant separate buildings connected by corridors. I will have at the next meeting of the Association the pamphlet of which Dr. Lyon says he has duplicate copies, and which he will be glad to send any member of the Association that may desire them.

Dr. BRUSH. One more thought. Now I don't know that it is exactly proper to criticise our superiors, the members of the Lunacy Board, but in three States that I know of the law requires or rather the rules and regulations of the Commissioners require that we shall do to our patients just exactly what Dr. Cowles and Dr. Chapin have told us we should not do, but carry out a plan entirely different. For in these States insane patients, as soon as admitted, are made to feel that they are in an asylum, and that they are not in a hospital to be cared for. I know that in the three States the regulations of the Commissioners require that within twenty-four hours after the reception of an insane patient he shall be told explicitly, no matter how delirious or sick he may be, that he is in a lunatic asylum. It seems to be a curious contradiction of what we are trying to do here, that the lawgivers are trying to make us do elsewhere.

The President, Dr. ANDREWS. Dr. Chapin will present to us a lock which he thinks has some advantages over the older styles in case of fire at night in a hospital.

Dr. CHAPIN. After the fire at the Philadelphia Hospital, which some will recollect was attended with serious loss of life, the Committee of Lunacy of Pennsylvania issued a circular suggesting that a simple bolt be used at night, placed on the outside of the door, so that if a fire occured at night, and keys were misplaced, or confusion occurred, the doors might be readily opened without the use of a key. The object desired seemed likely to be better accomplished by the use of a combined bolt and key. The lock which is here exhibited has a bolt thrown back and forth by a knob which is placed on the outside of the door. When the door is closed at night the bolt is thrown by simply turning the knob. During the night and in the morning the bolt can be thrown back into the lock by a turn of the knob. When thrown back the key locks the bolt for the day. The key will also lock the bolt when thrown into the keeper, if it is desired for any cause to close and lock the door during the day. Locks of this pattern have been placed on the doors of a new ward, and thus far I know of no objection to them, but see much to commend the object in view, which may be accomplished by some contrivance of this kind.

Dr. HURD. I wish to say a word in reference to Dr. Blackford's building at Staunton, Virginia. I went there sceptical as to the possibility of building brick buildings in the manner suggested in his report at the price mentioned. I came back even more sceptical than I went; in other words, the buildings are so well built and such models of cheapness, I am still troubled to know how he succeeded in building them. I suggested that he must have stolen the brick and lumber and got his carpenters to work for nothing, but I am assured that such is not the case. I believe, however, that one very important factor in the erection of the two buildings in the manner he has described

has been the fact that he has utilized the labor of patients to an extent which has never been done in any building in this country for the insane. The labor of excavation and the manufacture of brick were all done by patients. The clay was dug and mixed by the labor of patients, and the bricks were molded, handled, burned, sorted, counted and delivered upon the grounds by the same means, which has effected a material saving in the cost of building. I know it is customary in reports—I believe, in fact, I have used the expression myself—to say that in the employment of patients the creation of income should not in any way be considered. I am disposed to think that in the case of the chronic insane—those patients who are to live in institutions all the rest of their lives, who are in good bodily health, but whose minds are feeble so that they must live under guardianship and authority—it does no harm to have these patients contribute to their own support. In this respect I am inclined to think that the stereotyped expression, that the creation of income should not in any way be considered in the employment of patients, should be disregarded. I believe that every State institution for the insane, containing a large number of the chronic class, is justified in creating income from the labor of chronic patients. Of course, this labor should be under medical control; it should be suited to the strength and capacity of the patient, and it should be of such a character that the patient can do it with justice to his own strength and in a way to promote his general health. I believe that every institution owes it to the public and to itself to employ patients in this way if it can be done without interfering with their health and comfort.

I congratulate Dr. Blackford upon having done more in this direction than any other superintendent whom I have ever seen.

The PRESIDENT. I feel, gentlemen, like making some remarks on Dr. Blackford's paper, owing to his reference to the Buffalo State Hospital, to make an explanation of the situation at that institution.

In 1872 the corner stone was laid, and at that time, by direction of the Legislature, the managers were ordered to draw plans and make contracts for the erection of the buildings in their entirety. The plans were drawn and the contracts were let. They were made about the time of the Chicago fire, when brick were very expensive. The managers, however, supposed that they had very favorable prices under the contract. The cost *per capita* for patients in that institution has been put down at five thousand dollars by those who would criticise the action of the Board. This, I think, is an exaggeration, as three thousand would be more nearly correct. After these contracts were let, owing to the great expenditure of money, a change was made, and brick was substituted for stone in the construction of the last three buildings The change broke the contract, and the State has already paid seventy-five thousand dollars for making it, and has got brick instead of stone structures. The intention now is to put up one more stone building to harmonize the two wings of the hospital, when the rest will be put up of brick at a much less expenditure of money.

The doctor gave the *per capita* cost nearly correct for the last new building which is already in use. The next building, however, will cost one thousand dollars per head. It is the only way of getting out of the difficulty to go on and put up these buildings in accordance with the contract. If we do not we

shall have an expensive suit on our hands. The managers have decided it is as well for the State to put up first class building as to pay over the money to the contractors and accept inferior buildings. Since these contracts were made and the buildings put up, the State Care Act has gone into effect and we are now limited to five hundred and fifty dollars per capita. Last year an appropriation was made for the Buffalo State Hospital to the amouut of $85,000 to provide accommodations for one hundred and fifty patients. The managers wrote to the Attorney General the condition of affairs, and that appropriation was not accepted, because we could not erect structures in accordance with the terms of the law without breaking the contracts. As soon, however, as the last stone building, for which an appropriation is asked, is erected we shall be able to build more in accordance with the modern ideas of economy. I would state, however, as showing that we have some idea of economy, that a cottage was put up a few years since, which was not included in the original contract, for twenty-two patients, costing four thousand dollars, which, at the time, was as cheap as any accommodations could be provided, so long as we did not make our own brick.

I was very much pleased with Dr. Dewey's paper on employment of the insane, but I think we ought to state what is being done at Buffalo. We have for many years reported a percentage of 75 to 78 per cent of patients employed in something beside the mere care of person and room. Now we are preparing a large work-room into which we shall move our tailor-shop, shoe-shop, broom-room, mattress-room, etc., thus bringing them all under one roof and under better supervision. Every effort is being made to furnish skilled employment for our patients, as well as giving them occupation on the farm and on the grounds.

If there is any further discussion to be had upon this subject we would be pleased to hear it.

Dr. Godding made an announcement relative to the arrangements for the drive to the Soldiers' Home in the afternoon.

On motion, the Association adjourned at 12:55 P. M. until Thursday morning at 10:30 o'clock.

The afternoon was devoted to an excursion in carriages to the Soldiers' Home.

In the evening, the President of the Association, Dr. Andrews, held a reception in the banqueting hall of the Arlington Hotel.

The Association was called to order by the President, Dr. Andrews, Thursday, May 5th, 1892, at 10:50 A. M.

Dr. Godding. Yesterday I alluded to the Bloomingdale buildings for their new hospital. Dr. Lyon, who expected to be with us, is not here, but he has sent me a report which is a private report in regard to them. He will be happy to send to any member of the Association who may be building, or may desire it, a copy of the same on application.

The President, Dr. Andrews. The next order of business is the report of the Committee on Re-organization. This committee was appointed at the last meeting and are now ready to make their final report.

Dr. MILLER. I have a resolution here. Yesterday some of the brethren offered a resolution of thanks to Mr. G. P. A. Healy for his gift to the Kankakee Hospital. The name of another philanthropist should not be forgotten, whose benefactions are comparatively small in value, but I suppose every institution in the United States has received from year to year the benefactions of this gentleman—a gentleman with whom I am not personally acquainted, Mr. John S. Pierson, 150 Nassau street, New York.

This is the resolution: "Resolved, That the thanks of this Association are eminently due to, and are hereby most gratefully tendered to Mr. John S. Pierson, 150 Nassau street, New York City, for his many annual gifts of Christmas and New Year's cards, books and pictures to the unfortunate patients committed to our care.

Resolved, That our Secretary be requested to furnish Mr. Pierson with a copy of this resolution.

The resolution was unanimously adopted.

The PRESIDENT. The Chairman of the Committee on Re-organization is Dr. Stearns, of Connecticut, from whom we will now hear.

Dr. STEARNS. In behalf of the Committee on Re organization, I have to report that that committee, at the last annual meeting, held a session; that they discussed the importance of some such re-organization as had already been suggested to this society. There was no difference of opinion in reference to the desirability of the proposed change, and a vote was passed appointing a sub-committee to draft a resolution and by-laws for the consideration of the general committee at some subsequent date. That committee consisted of Drs. Cowles, Chapin and Hurd. The work intrusted to this committee has been carefully done, and the result was submitted to the general committee at an early part of this meeting of the Association. After the suggestion and adoption of some slight changes, the desirability of which was agreed to by all the members present, the report was approved, and a vote was passed recommending its adoption by the Association. It now only remains for me, as chairman of the general committee, to call on Dr. Cowles to read the constitution and by-laws, as adopted by us, to the members of the Association now present.

The PRESIDENT. It is suggested by Dr. Cowles that we ask the Secretary to read the report of the preliminary session of last year. The Secretary will read the action taken by the Association last year regarding this matter of re-organization.

The Secretary then read the report of the Committee, made last year, which was as follows:

"After a careful consideration of the subject the Committee would report that it has deemed it advisable to make a re-organization of the Association substantially on the lines laid down in the paper of Dr. Cowles, presented to the Association yesterday. If it would meet the unanimous approval of the Association the Committee would ask authority to print, at the expense of the Association, a constitution and by-laws for the information of the members, to be presented for final action at the next annual meeting."

The report of the committee was accepted, and the committee was given authority to print.

The PRESIDENT. I wish to say that this committee was appointed last year, and made its report on the last day of the session, which was accepted by the Association. The committee was ordered to make a re-organization and report a constitution and by-laws for final action at this meeting. I think that is understood now.

Dr. COWLES. A word of explanation is perhaps desirable. The labor of preparing this draft of the constitution was entered upon with the intention of making a very careful study of the condition of the Association, to preserve intact, as far as possible, its traditions, its membership, seeking to give stability to its future work, and to put it in a position to hold property and to do other things common to the work of such an Association. That being the purpose in view, the draft of the constiuttion was carefully studied. There was considerable difficulty, as all of you may understand, in getting together the sub-committee, although the members lived no farther apart than Boston, Philadelphia and Baltimore. Several appointments were made for meeting, but illnesses and important business delayed us. When a meeting was had early in April, ten or twelve hours were devoted by the committee to revising the first draft. That draft was put in print, and the proof sent to each member of the sub-committee and carefully revised. That required time, so that we only got this copy of the report from the printer a day or two before my leaving Boston. It was necessary then for the sub-committee to submit it to the general committee. The general committee determined upon several revisions, and it has required time since then for having the clerical work done of making these amendments. I was greatly disappointed, and I have to apologize to the members of the Association for not placing these copies before them as early as was intended; but it was done at the earliest possible moment. Last evening, late, some of the copies were ready and were distributed among a few of the members, but I was unable to see all. Some previous copies before amendment were given the members, on their request to see what had been done, but this morning the report of the general committee is now presented to you as early as we could do it formally. These copies with the word "amended" written on the title page are the correct ones, except in one verbal point, which I will mention when I come to it.

This purports to be the constitution and by-laws of the American Medico-Psychological Association.

Dr. Cowles then read the constitution and by-laws as prepared by the committee.

The President, Dr. ANDREWS. You have heard the report of the Committee on Re-organization. The subject is now open for the action of the Association.

Dr. BUCKE. I need not say that, on the whole, I am in very strong sympathy with the action of this committee, and think that the constitution proposed to us is an admirable one, a great advance upon the very loose constitution, or none at all, under which we have been living for such a long time. I do not desire to criticise the action of the committee in any unfavorable way whatever, but I want to move an amendment as regards the proposed name of the Association. I suppose that is in order at the present moment, is it not, Mr. President?

The PRESIDENT. I suppose that any motion the members desire to make regarding the constitution will be in order.

Dr. RUSSELL. An amendment can only be in order after a motion to adopt this report.

Dr. D. CLARK. In order to bring the matter into form I move the adoption of the report.

The PRESIDENT. Remarks are now in order.

Dr. BUCKE. I move that the words between "the," line one, and "this," line two, be struck out and the following words substituted: "Psycho-Medical Association of North America," and the reasons why I propose that amendment, that change of name, are briefly as follows:

In the first place I think that the new name proposed is shorter and more convenient for use. Secondly, I think that the name proposed by the committee is exceedingly common, we might almost say hackneyed; it is used all through Europe. With some people that might be a reason for adopting it, but I don't think it is. I think a more characteristic name, a name belonging more directly to the Association, is better. The third reason is that I think the name, as read at present, gives prominence to the word "Psychological," and the name proposed gives prominence to the term "Medical," and I think that the term "Medical" should be prominent in the name. A fourth reason is that I think the word "North" should be added before "America." In that connection the word "America" means either too much or too little. If we take it as meaning all America, South as well as North America, it means too much; while if it means United States of America it means too little and excludes Canada. And I would wish, for my part, that the Canadian section of the Association should be fully and explicitly recognized in the name of the Association.

Dr. J. G. ROGERS. I second the motion of Dr. Bucke, considering that what he has said is quite right and proper.

Dr. HURD. There are one or two objections, it seems to me, to this change of name. "Psycho-Medical" corresponds too nearly with the name of a quack association in this country known as the "Physio-Medical." cal." The names are very much alike, and we prefer not to have even the appearance of evil. Then as to its being the Medico-Psychological Association of North America, the committee provided for that by a subsequent section, that corresponding members should be "physicians not resident in the United States and British America," thus expressly recognizing that the United States and British America constitute the field of this Association.

Dr. COWLES. In regard to the sentiment of exclusion in the name, I merely want to say that for some forty odd years the Association has gone on under the name of Association of Superintendents of "American Institutions for the Insane," and our Canadian brethren have gotten on so delightfully with us under that name and term that I think we could still preserve the tradition of the name by simply saying "American."

Dr. D. CLARK. The name "American" meets all requirements. It is comprehensive, and in reality means the whole continent. If it be true that the designation recommended by Dr. Bucke sounds very much like a quack association in a neighboring city, then would it be well to avoid any such name,

Were the term "American" used by the people on this Northern Continent who own the larger part of it, then Canada could lay claim to that term, as it owns the larger half of this Continent. In fact we own the North Pole.

Dr. CHAPIN. I desire to add to what has been said, that the term "Medico-Psychological" was considered the proper term. We are familiar with that combination of terms, and we desire to have an American institution that will affiliate with corresponding associations in other countries. We know the term is common, and it has great advantage in the fact that it is common.

Dr. BLACKFORD. I hope the report will be adopted as a whole. Certainly, it is a very simple and a very business-like report, and I am sure that the Association could not do better than to adopt this report without any amendment whatever. I move that the report be adopted.

The PRESIDENT. The question is on Dr. Bucke's amendment, which was seconded, regarding the change of name, and if there are any further remarks to be made, we should like to hear them.

Dr. MILLER. Do we vote on it by section or as a whole?

The PRESIDENT. We have already begun the consideration of the report. The amendment now before the Association is that of Dr. Bucke.

The vote was taken and the amendment was lost.

Dr. COWLES. In behalf of the committee, recognizing the justice of the sentiment Dr. Bucke has represented, I wish to state that the committee would like to suggest this amendment in Article III, line 11, so that it shall read, "Active members, who shall be physicians residing in the United States and Canada," (or British America, if Dr. Bucke prefers that.)

Dr. BUCKE. I would prefer Canada.

Dr. COWLES. We have in another place specified that corresponding members may be gentlemen who are actively interested in the treatment of insanity in the United States and British America. Now my preference would be to use the same terms, and I make this motion in those words, "resident in the United States and British America."

The amendment was seconded by Dr. CALLENDER, and carried.

Dr. GODDING. Do I understand the entire constitution to be up for amendment?

The PRESIDENT. It is.

Dr. GODDING. Then, I would suggest that in line 53 we strike out "as" and substitute "that" for it.

The amendment was seconded by Dr. COWLES, and carried.

Dr. BRUSH. In line 90, I move to substitute the word "be" for "is," the first word in the line.

The amendment was seconded by Dr. ROGERS, and carried.

Dr. ROGERS. In line 115, I move that the word "except" be stricken out and the participle "excepting" be put in its place.

The amendment was seconded by Dr. HURD.

The chair was in doubt as to whether the amendment was carried, and called for a second vote, which was twenty-three in favor of and ten against the amendment, and it was then declared carried.

Dr. C. G. HILL, of Maryland. Section VIII contemplates the election of the officers on the second day of the meeting. I move that so much as relates

to the election of the president and vice president be left until the last day of the meeting.

Dr. BUCKE. It would be too late.

Dr. BRUSH. There is nothing in the constitution which prescribes that there shall be more than two days; the second day may be the last day.

Dr. HILL. The election generally comes at a period when things are immature, the membership is not complete. The body would act more intelligently later in the session than in the early part.

The PRESIDENT. Heretofore, the election has been held on the first day.

Dr. HILL. There is another clause relating to the election of officers, which occurs in lines 102 to 105: "The President, Vice President, the Secretary and Treasurer, and Auditors, shall hold office for one year, or until the beginning of the term for which their successors are elected." If it should occur at any time that their successors who are elected should die, or should by any means be unable to attend to their duties, there would be no officers for that term.

The PRESIDENT. Looking in the 116th and 117th lines, we see a provision has been made for such a contingency.

Dr. HILL. It is generally customary in cases of this kind for officers to hold their respective offices until after the election of their successors, and it seems to me very absurd to make two provisions.

Dr. COWLES. Line 104, "or until the beginning of the term for which their successors are elected," applies to all the officers just specified in the lines before. But there are two classes of officers, as to time of beginning duty; one class, excepting the President and Vice President, beginning duty at once. For them it might read "until their successors are elected" and read correctly. But the phrase as it now stands, "until the beginning of the term for which their successors are elected," means the same for them, if only in a few more words. The added words are necessary, however, to make clear and to provide for a condition applicable alone to the President and Vice President. The purpose is that they shall be elected, for example, at this meeting, the given President-elect and Vice President-elect, to take office at the beginning of the next meeting, a year from now. So we cannot say that they hold office until successors are elected, for that infers immediately, and there would be no condition of President-elect. But to provide for that we interpose the words, "the beginning of the term." If there should fail to be an election there would be no beginning of the term of a new officer, and those in office would hold over. The fact is precisely the same for those officers as for the others, that they hold office until their successors are elected.

The PRESIDENT. If there are no further suggestions to be made, the original motion will now be put regarding the adoption of the constitution and by-laws as presented.

Dr. RUCKER. On page 8, in line 153, it seems to me there should be some change made. As I understand this, "the Council is empowered to manage all the affairs of the Association, subject to the constitution and by-laws; to appoint committees, and spend money out of its surplus funds." Now, it seems to me that some change should be made there. As it now is, the Association has nothing to say regarding the expenditure of money. It seems to me that it should read "recommend the expenditure of money." Then, as

a matter of course, the Association could vote upon the recommendations made by the Council. As it now is, it is left entirely to the Council to expend money whenever in its judgment it may see fit to do so, without any reference at all to the wishes of the Association as a body. I have not had time to really look over this and make any special recommendations with reference to changes, but I think, however, that there should be some attention paid to that matter.

Dr. D. E. HUGHES. Lines 163 and 164 place a proper safeguard about the expenditure of money. It says, "with the approval of the Association." It seems to me that covers the whole ground.

The President, Dr. ANDREWS. You will note that even that expenditure is for "specific purposes," and that, as the doctor says, is under the approval of the Association. I merely make that statement as showing the real intent of it.

The question is upon the adoption of the constitution and by-laws, as amended by the Association. If there are no further remarks to be made, the motion will be put.

The motion was declared unanimously carried, and the announcement was received with applause.

The following are the Constitutions and By-Laws thus adopted:

CONSTITUTION.

Article I. This organization shall be known as the AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION, this name being adopted in 1892, by "The Association of Medical Superintendents of American Institutions for the Insane," founded in 1844.

Article II. The object of this Association shall be the study of all subjects pertaining to mental disease, including the care, treatment, and promotion of the best interests of the insane.

Article III. There shall be four classes of members: (1) Active members, who shall be physicians, resident in the United States and British America, especially interested in the treatment of insanity; (2) Associate members; (3) Honorary members; and (4) Corresponding members.

Article IV. The officers of the Association shall consist of a President, Vice President, Secretary—who shall also be the Treasurer—two Auditors, and twelve other members of the Association to be called Councillors; all of these officers together shall constitute a body which shall be known as the Council.

Article V. The active members of the Association shall include all past and present medical superintendents named in the official list published for 1892 of members of "The Association of Medical Superintendents of American Institutions for the Insane;" the honorary members shall include those so designated in that list; the associate members shall include all the assistant physicians named in the same list; it being provided that said list shall be corrected by the Council, as may be necessary to carry out the intention of the Constitution as to the continuance of existing membership.

Every candidate for admission to the Association hereafter, in either of the three above named classes of members, or as a corresponding member, shall

be proposed in writing to the Council, in an application addressed to the President, with a statement of the candidate's name and residence, professional qualifications, and any appointments then or formerly held, and certifying that he is a fit and proper person for membership. In the case of a candidate for active or associate membership, the application shall be signed by three active members of the Association; and by six active members for the proposal of an honorary or corresponding member. The names of all candidates approved by a majority vote of members of the Council present at its annual meeting shall be presented on a written or printed ballot to the Association at its concurrent annual meeting, at least one session previous to that at which the election is made, which shall be by ballot at a regular session, and require a majority vote of the members present. The only persons eligible for associate membership are regularly appointed assistant physicians of institutions for the insane that are regarded to be properly such by the Council; and they are eligible for such membership only during the time they are holding such appointments. After holding such an appointment three years, an associate member may become an active member by making application in writing to the Council, and upon its approval being elected in the manner heretofore prescribed.

Article VI. Physicians, and others who have distinguished themselves by their attainments in branches of science connected with insanity, or who have rendered signal service in philanthropic efforts to promote the interests of the insane, shall be eligible for honorary membership.

Physicians not resident in the United States and British America, who are actively engaged in the treament of insanity, may be elected corresponding members.

Active members only shall be entitled to a vote at any meeting, or be eligible to any office. Honorary and corresponding members shall be exempt from all payments to the Association.

Article VII. Any member of the Association may withdraw from it on signifying his desire to do so in writing to the Secretary, provided that he shall have paid all his dues to the Association. Any member who shall fail for three successive years to pay his dues after special notice by the Treasurer shall be regarded as having resigned his membership, unless such dues shall have been remitted by the Council for good and sufficient reasons.

Any member who shall be declared unfit for membership by a two-thirds vote of the members of the Council present at an annual meeting of that body shall have his name presented by it for the action of the Association, from which he shall be dismissed if it be so voted by two-thirds of the members present at its annual meeting.

Article VIII. The Officers and Councillors shall be elected at each annual meeting. They shall be nominated to the Association, on the second day of the annual meeting in the order of business of the first session of that day, by a committee appointed for that purpose by the President; and the election shall take place immediately. The election shall be made as the meeting may determine, and the person who shall have received the highest number of votes shall be declared elected to the office for which he has been nominated.

The President, Vice President, the Secretary and Treasurer, and Auditors,

shall hold office for one year or until the beginning of the term for which their successors are elected. The Secretary and Treasurer, and one Auditor, are eligible for re-election. At the first election of Councilors, four members shall be elected for one year, four for two years, and four for three years; and thereafter four members shall be elected each year, to hold office three years, or until their successors are elected. The President, Vice President, one Auditor, and the four retiring Councillors are ineligible for re-election to their respective offices for one year immediately following their retirement. All the Officers and Councillors shall enter upon their duties immediately after their election, excepting the President and Vice President. When any vacancies occur in any of the offices of the Association, they shall be filled by the Council until the next annual meeting.

A quorum of the Council shall be formed by six members; and of the Association, by twenty active members.

Article IX. The President and Vice President for the year shall enter on their duties at the beginning of the business of the next annual meeting after their election. The President shall prepare an inaugural address, to be delivered at the opening session of the meeting. He shall preside at all the annual or special meetings of the Association or Council, or in his absence at any time the Vice President shall act in his place.

The Secretary and Treasurer shall keep the records of the Association and perform all the duties usually pertaining to that office, and such other duties as may be prescribed for him by the Council: and under the same authority he shall receive and disburse and duly account for all sums of money belonging to the Association. He shall keep accurate accounts and vouchers of all his receipts and payments on behalf of the Association, and of all invested funds, with the income and disposition thereof, that may be placed in his keeping, and shall submit these accounts, with a financial report for the preceding year, to the Council, at its annual meeting. Each annual statement shall be examined by the auditors, who will prepare and present at each annual meeting of the Association a report showing its financial condition. The Council shall have charge of any funds in the possession of the Association, and which shall be invested under its direction and control. The Council shall keep a careful record of its proceedings, and make an annual report to the Association of matters of general interest. The Council shall also print annually the proceedings of the meetings of the Association and the reports of the Treasurer and Auditors.

The Council is empowered to manage all the affairs of the Association, subject to the constitution and by-laws; to appoint committees from the membership of the Association, and spend money out of its surplus funds for special scientific investigations in matters pertaining to the objects of the Association; to publish reports of such scientific investigations; to apply the income of special funds, at its discretion, to the purposes for which they were intended. The Council may also engage in the regular publication of reports, papers, transactions, and other matters, in an annual volume, or in a journal, in such manner and at such time as the Council may determine, with the approval of the Association.

Article X. Amendments to the constitution and by-laws shall be taken

up for consideration at the first session of the second day of any annual meeting, and may be made by a two-thirds vote of all the members present, provided that notice of such proposed amendment be given in writing at the annual meeting next preceding. It shall be the duty of the Secretary to send to all the members a copy of any proposed amendment at least three months previous to the meeting when the action is to be taken.

BY-LAWS.

Article I. The meetings of the Association shall be held annually. The time and place of each meeting shall be named by the Council, and reported to the Association for its action at the preceding meeting. Each annual meeting shall be called by a printed announcement sent to each member, at least three months previous to the meeting.

The Council shall hold an annual meeting concurrent with the annual meeting of the Association; and the Council shall hold as many sessions, and at such times, as the business of the Association may require.

Special meetings of the Council may be called by the order of the Council. The President shall have authority at any time, at his own discretion, to instruct the Secretary to call a special meeting of the Council; and he shall be required to do so upon a request signed by six members of the Council. Such special meetings shall be called by giving at least four weeks' written notice.

Article II. Each and every active and associate member shall pay an annual tax to the Treasurer, the amount to be fixed annually by the Council, not to exceed five dollars for an active member, or two dollars for an associate member.

The order of business of each annual meeting of the Association shall be determined by the Council, and shall be printed for the use of the Association at its meeting. The Council shall also make all arrangements for the meetings of the Association, appointing such auxiliary committees from its own body, or from other members of the Association, and making such other provisions as shall be requisite, at its discretion.

Dr. HURD. I wish to move the adoption of certain constituent acts. The object of these acts is to carry into effect the Constitution and By-laws which have just been adopted, and to make the transfer from the Association of Superintendents to the American Medico-Psychological Association.

The constituent acts are as follows:

To carry into effect the Constitution and By-laws the following constituent acts are ordered:

ACT 1. That an election be made forthwith of a President, Vice President, Secretary and Treasurer, two Auditors, four Councillors for three years, four Councillors for two years and four Councillors for one year, and that the Council thus elected shall immediately enter upon the discharge of their duties, with certain reservations provided under Act 2.

ACT 2. That the President and Vice President now in office continue to discharge their duties until the first session of the Association in 1893, when the President shall deliver his retiring address, and the President and Vice

President now elected shall assume office at the conclusion of this address, and the President shall deliver an inaugural address.

ACT 3. That all unfinished business, books, records, moneys, credits and indebtedness, copyrights and other property or assets of the Association of Superintendents of American Institutions for the Insane be transferred to the custody of the Council of the Medico-Psychological Association, as provided by the Constitution and By-laws.

Dr. D. E. HUGHES. There is one suggestion I would move, and that is the appointment of a committee to nominate the various officers, to expedite the business. If we are going into the election of twelve Councillors, a President, etc., to take office at the next meeting, it would take the business of an entire session; so that to expedite matters I would move for adoption the appointment of a committee for that purpose, and that the President of this Association be *ex officio* chairman of that committee.

Dr. HURD. I think that is provided for in Article VIII of our Constitution, which reads that "they shall be nominated to the Association on the second day of the annual meeting in the order of business of the first session of that day by a committee appointed for that purpose by the President."

Dr. COWLES. It seems to me that the case is clearly determined by the transfer. That puts us under the immediate action of the Constitution and By-laws. The Constitution and By-laws direct the President to appoint such a committee for the nomination of officers.

The motion to adopt the Constituent Acts was seconded by Dr. Hill, of Iowa, and unanimously carried.

The President, Dr. ANDREWS. I will appoint a committee of five to nominate officers under the new constitution, and will announce the names immediately after the reading of the first paper of this morning. This seems to conclude the business of re-organization.

Dr D. CLARK. I don't know whether I am in order or not, but it seems to me that hearty thanks should be given by this Association to the members of the committee that have so admirably arranged and compiled the Constitution and By-laws. It is very easy for us to read the Constitution and By-laws after the incubation has taken place, but I am quite convinced that a great deal of valuable time and mental work have been expended on this production. I have been a member of this Association for sixteen years and I now feel that for the first time we have a constitution under which we can work according to rules, sanctioned by ourselves, after mature reflection.

I move a vote of thanks to the members of the Committee for their satisfactory labors in connection with the production of this Constitution.

The motion was seconded by Dr. Hill and carried.

Dr. STEARNS. As chairman of that committee I beg to tender to the members of the Association the appreciation of the committee for the very generous recognition they have now made in reference to its labors. I am sure, however, that the members of the general committee would not excuse me if I did not state that the thanks of the Association are due not to the general committee but to the sub-committee that was appointed to prepare this Constitution and By-laws. That committee, as you know, consisted of Drs. Cowles, Chapin and Hurd. It seems to the members of the general

committee, who have not actively participated in the preparation of the report, that it is a work of exceeding excellence. We appreciate it, and we very highly appreciate the honor that you have done them, and us through them, in adopting so unanimously the report we have presented. (Applause.)

Dr. COWLES. Mr. President. I should fail in my duty to the sub-committee, of which I happen to be chairman, did I not return thanks for the very generous appreciation which has characterized our work It was a labor of love from the beginning, and what has been said of it, the feeling with which it has been received, the expressions of the sentiments of the Association are a certain and full reward to us for all that we have done. (Applause.)

Dr. CHAPIN. Before that matter is allowed to close, as one of the sub-committee, I desire, on behalf of the majority of that committee, to express our sincere thanks to Dr. Cowles. I think the success of this whole matter is largely due to my friend and not to the remainder of the committee.

Dr. HURD. I wish to reiterate the statement, that Dr. Cowles is the guilty man. He has done all the work and has given himself all the worry, and the other members of the committee have simply entered into the reward.

Dr. COWLES. I have nothing to do but to accept the verdict and stand convicted.

Dr. STEDMAN then read his paper on "Separate Provision for Epileptics, both Public and Private." The paper was illustrated by views showing the construction of the foreign epileptic colonies, and maps of locations, the arrangement of buildings and sites.

The President, Dr. ANDREWS. I promised to appoint a committe on nominations after the reading of the last paper. The committee is appointed as follows: Dr. Bucke, of Ontario; Dr. Chapin, of Pennsylvania; Dr. Murphy, of North Carolina; Dr. Gorton, of Rhode Island; and Dr. Rucker, of California.

Dr. KELLOGG read a paper on "Affections of Speech in the Insane."

Dr. D. CLARK. Perhaps it would be well to have a few words on the excellent paper that has been read at the evening session.

The PRESIDENT. I was going to remark that this paper can be taken up at the evening session. It is now one o'clock and I presume some of the members are anxious to leave.

Dr. BRUSH. If in order, I would move that the discussion of the paper be made a special order for the first item on the programme of the evening session. Carried.

At 1 P. M., on motion of Dr. Blackford, the Association adjourned until 8 P. M. An enjoyable excursion was made by steamer to Marshall Hall during the afternoon.

The Association was called to order at 8:35 P. M. by the President, Dr. Andrews, who announced as the first business of the session the reading of the report of the committee on nominations.

Dr. BUCKE, as chairman of the committee, read his report as follows:

The committee on nominations submit the following names for officers for the ensuing year:

For President, Dr. Peter Bryce, of Alabama.

For Vice President, Dr. John Curwen, of Pennsylvania.

For Secretary, Dr. Henry M. Hurd, of Maryland.

For Auditors, Dr. Richard Dewey, of Illinois, and Dr. Charles K. Clarke, of Kingston, Ont.

For Councillors to hold office for three years, Dr. Edward Cowles, of Massachusetts, Dr. J. H. Callender, of Tennesee, Dr. W. W. Godding, of the District of Columbia, and Dr. G. C. Palmer, of Michigan.

For Councillors to hold office for two years, Dr. G. Alder Blumer, of New York; Dr. H. P. Stearns, of Connecticut; Dr. C. G. Hill, of Maryland, and Dr. E. N. Brush, of Maryland.

For Councillors to hold office for one year, Dr. G. H. Hill, of Iowa; Dr. J. F. Miller, of North Carolina; Dr. P. M. Wise, of New York; and Dr. T. W. Fisher, of Massachusetts.

The PRESIDENT. You have heard the report of the committee. What is the pleasure of the Association?

Dr. BLACKFORD I move the adoption of the report.

The motion was seconded by Dr. Munson and carried unanimously.

The PRESIDENT. The report of the committee is adopted and the officers are elected for the ensuing year.

I wish to say to the members of the Council that a meeting should be held this evening to transact further business to submit to the Association to-morrow morning before the adjournment, and I trust that all of the Council who have been elected to-night will remain after the close of the meeting that we may have a session.

At the time of adjournment this morning, immediately after the reading of Dr. Kellogg's paper on "Affections of Speech in the Insane," the discussion of that paper was fixed upon as the first business of the evening. That paper is now open for discussion, also the paper of Dr. Stedman upon "Separate Provision for Epileptics, both Public and Private."

Dr. BAKER, of Massachusetts. I wish to say just one word in regard to the paper of Dr. Stedman. For some time I have been urging separate accommodations for epileptics, my first experience being with children. Concerning the desirability of such institutions I think there can be no question. There is hardly a gentleman present to-day who has not in his institution one or more cases he would be glad to get rid of, who would be more suitably cared for elsewhere. How to provide such accommodations is quite another question. As a member of the committee with Dr. Stedman, Dr. Jelly and two others, chosen by the Massachusetts Medical Society to secure legislative action in this matter in that State, I wish to urge the necessity of the co-operation of this Association in our efforts in this direction.

This matter of separate accommodations for epileptics has been discussed quite recently by the British Medico-Psychological Association, whose reports you have probably read, and the prevalent opinion was very largely in favor of separating insane from non-insane epileptics. And not only that, but they recognize in Great Britain the necessity, which we all recognize in this country, of providing separate accommodations for this class of patients. What I particularly wish to urge upon the Association is that whenever separate accommodations shall be provided, they may be provided for non-insane in

distinction from insane epileptics. And I think we shall find that there are physicians in private practice who meet with very many cases who would decline to go to an institution for epileptics if they were to be in any way brought in contact with cases of insanity.

Another point which was not mentioned in the paper which seems to me of very decided importance, is that, as we all know, epilepsy is, so to speak, a bane of the medical profession, so far as treatment is concerned. Again and again have I seen cases of epilepsy that during a hospital residence have remained free from their attacks for a long time, where upon returning to their homes and being placed under home surroundings, the attacks recurred.

Another question which is also of importance in this connection is that if separate institutions for epileptics were provided and placed in the hands of men who would scientifically study the subject of epilepsy in all its bearings, they might thereby make some contributions to the treatment of epilepsy from a medical standpoint and furnish us with better ideas concerning its pathology and treatment than we now possess.

I simply urge this matter because I know that only by long continued agitation can any desirable action be taken.

Dr. WITMER. Mr. President: The few remarks I wish to make apply more particularly to the subject under discussion last Tuesday, but Dr. Stedman's paper this morning comprehends the treatment of epileptics and affords me an opportunity to say briefly that which I should have said then but for lack of time.

With reference to the surgical treatment of epileptics and the insane, it is unnecessary for me here to speak of the great value of the works of Ferrier, Charcot and Professor Victor Horsley of London. The latter I have had the pleasure of hearing upon several occasions, and I can say he excites one's admiration, fires one's enthusiasm, and impresses one with his profundity and conscientiousness. It is also unnecessary for me to say that the late Dr. Agnew and Professor William Keen, of the Jefferson Medical College of Philadelphia, have probably done more in this matter than any two men in this country. I have recently had correspondence with Dr. Keen upon this subject, and he, with the majority of writers upon it, is not very enthusiastic with regard to the results of surgical interference in epileptics, except possibly in the case of children and in cases of epilepsy due to recent traumatic causes, before the lesions produced by these traumatic causes have set up more than a local irritation in the parts affected; or, as commonly spoken of, before an epileptic habit has been established.

As I remarked, he is more hopeful of treatment by surgical interference in children than in grown persons, and he gave me the names and addresses of the parents of several children upon whom he had operated with partial success, with whom I corresponded.

He, however, takes comparatively little credit for many of the cases upon which he has operated. One in particular, a boy six years of age, whom he operated upon for epilepsy, traumatic in character, that had existed three years previous to the operation. In this case he writes he operated without immediate success while the child remained under the care of its parents. The child was taken to an institution for feeble minded children at Haddonfield,

New Jersey, under the supervision of Misses Cox and Bancroft. Under their care, the child very materially improved in his morals and habits of life, the epileptic seizures diminished very markedly; from one to two or three seizures a day they were finally reduced to not more than one or two in four weeks. The last report he had from these ladies informed him that the boy had not had a fit since the beginning of March. *

With our present knowledge of the subject it is quite evident that it is in operations upon children that we must hope to afford relief and get the most satisfactory results, while very little improvement is to be hoped for or expected in mature persons, particularly after the so-called "habit of epilepsy" has been established, and which is now believed to be due, not so much to a habit, as it is to some (I presume I may call it for want of a better term) specific degeneration, or sclerosis of the brain and the nervous tissues. However, inasmuch as we are perfectly justified in experimenting (if I may use that expression) with therapeutic measures, why may we not also continue further experiment with surgery in this same direction? But my experience and observation teach me that the greatest relief is to be had in the direction mentioned by Dr. Stedman this morning. We can mostly relieve epileptics by judicious medical treatment and by attention looking to their hygienic and moral improvement, which I believe, with Dr. Stedman, can be best accomplished by entirely separating them from the insane.

With reference to the subject of surgical interference for epilepsy in the female, or insanity in the female which is caused by disease peculiar to the sex, much has been said and much has been written, and it is a subject to which I have given some consideration. We have Dr. Stone's authority, as well as many others, for saying that to this time the results of surgical interference have not been very satisfactory, and yet I think we are justified in still further investigation and further operation in these cases. Those of us who are familiar with the movement in favor of female physicians in the State of Pennsylvania, know that one of the principal arguments used to effect the introduction of female physicians as assistants into hospitals for the insane was that there was no one so well qualified to study the diseases of the female as the female physician, and no one probably better appreciates this fact than our worthy secretary, Dr. Curwen, who had a female assistant physician appointed to investigate this subject of special diseases in insane females. After spending three years in the hospital at Harrisburg she retired from the field, saying in substance that she had not found as much disease as she had expected nor met with the results that she had hoped for when she entered that field of investigation.

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*NOTE—Since the meeting of the Association I visited the boy referred to, and found that the paralysis and atrophy of the arm and leg, which existed after the operation, were gradually disappearing, and that his morals and disposition, which were deplorable previous to Dr. Keen's interference, were improved to such an extent as to make him a pleasant and affectionate child. But the most remarkable feature of the case was the great increase, to twenty words, in the child's vocabulary, which previous to the operation had been reduced to one—a very emphatic "No."

For full history of case, &c. &c., see "Medical News," April 12, 1890, and Nov. 29, 1890.

Now, observe when that estimable woman and well equipped physician, Dr. Bennett, of Norristown, entered upon her present field of labor, she scarcely gave the idea of so-called female diseases a thought, but wisely sought for causes of insanity in the female in every direction, and she, as we all know, has written several good articles upon renal disease as a cause of insanity, and I believe she is to-day making an unsentimental study of diseases of the heart as a cause of insanity in persons of her sex.

The PRESIDENT. Are there any remarks to be made on Dr. Kellogg's paper.

Dr. D. CLARK. I think it would be treating the able paper of Dr. Kellogg with scant courtesy were we to overlook it. I am not sure that there is any question of more interest to us as specialists than the paper which Dr. Kellogg has read.

As the Association is aware, a great struggle had been going on, in short, a battle ground has been established, on Broca's convolution, (the third left frontal convolution.) and we have arrayed on both sides the great men of our speciality; the Ferrier school on one hand, backed by such men as Richer, Charcot, Rokitansky, Schiff, Seppilli and Tamburini. On the other hand we have a large number of worthy men, as Brown-Séquard, Seguin, and others I might mention, taking their stand against the localization theory of Ferrier.

It is not to be wondered at, then, that the discussions in connection with the functions of that particular part of the brain have caused particular attention to be given to it. I might say that the subject has cropped up in jurisprudence in connection with testamentary capacity, in which it was held in courts, that if it could be found that a man was afflicted with simple aphasia, ataxic or amnesic aphasia, or any other form of aphasia that affects the functions of this part of the body in vocalization and memory, he would thereby become always mentally incapacitated to make a will. Therefore it is important for us, in the light of medical jurisprudence, to have a paper of this kind discussed in such an able manner as has been done by Dr. Kellogg in the admirable monograph which has been read to us. My experience has been that while it is true that a large number of people afflicted with amnesic aphasia have become insane, yet many of those thus afflicted have not become insane and have still maintained mental integrity in spite of the slightly deficient memory which this particular form of disease manifests.

I was at a trial not many weeks ago in which this question came up and in which a large sum of money was involved. The point was as to whether a man having had simple ataxic aphasia—simple aphasia or hemiplegia consequent upon an attack of apoplexy—was thereby competent or otherwise to execute a will. This man had aphasia and hemiplegia—amnesic aphasia—but had recovered largely from this condition and had gone on with his business, and in a year and a half after the attack had accumulated in business transactions $100,000 more than he previously possessed. He made a codicil after these attacks, at the same time he bought and sold, was engaged in ship building, and was immersed in other business on a large scale. For a year and a half after and till his death the symptoms still continued in a mild degree. Throughout the whole of the year and a half he showed his business ca-

pacity and was recognized as a shrewd man. I am convinced in my own mind that it does not do to declare a man incompetent simply because he may have ataxic aphasia, amnesic aphasia, or even hemiplegia.

I believe that a man may have all of them in a mild degree without being of neceseity incompetent to execute a will, that is to say, may become amnesic and may not become insane, and therefore the mere fact of being attacked in this way is not evidence *per se* of mental alienation. That is one point I wish to make in regard to this subject. Many, for example, have ataxia and paralysis of the *right* side of the body from the condition of one hemisphere with paralysis of the *left* facial muscles. The explanation is in this way: That while the ataxia which manifests the cross condition from one side of the brain to the opposite side of the body is, because of decussation, in the base of the skull, the area of the gyrus that supplies the facial muscles with sensory and motor stimulation is above this decussation in the medulla oblongata. It does not follow that because a man has slight aphasia, slight loss of memory for proper names or defective recollection for certain words, which is a weakness in all our memories, that therefore a man will be incapacitated from doing his ordinary work. I think a business man having highly developed nervous centers in certain directions is likely to have these higher centres intact and less liable to disintegration than are less exercised and consequently weaker centers of lower organization. The order of building up is usually followed by the inverse process of breaking down. One further remarkable feature in ataxic aphasia is that those afflicted have the power of deglutition, the control of the tongue and throat, and no disease evident in connection with any muscles or nerves supplying the glosso-phrayngeal district. In such is power to recall any particular words representing certain ideas; but the co-ordination is wanting to produce muscular movements in vocal utterances.

This link is not wanting in ideation but in function; hence the difference in this form of weakness from that of amnesic aphasia.

Dr. GORTON. Although I had not the pleasure of listening to the entire paper of Dr. Kellogg, as related to the subject matter of the paper, and more particularly relating to the subject introduced by Dr. Clark, it may not be uninteresting if I report a case which was to me unique and interesting.

A sea captain, about forty-five years of age, was admitted to the Danvers hospital some years since, suffering from the effects of an attack of cerebral apoplexy. He had previously suffered from specific disease and had been addicted to the use of alcohol. At the time the apoplectic seizure occurred he was known to have Bright's disease of the kindeys. The paralytic shock was severe, He was for a long time semi-conscious and was a long time in rallying from the initial shock, so that he was bedridden for a number of months during the first year, and he never regained the use of his arm and leg or the power of speech in any degree whatsoever. He did, however, slowly acquire the power to express himself quite clearly by pantomime, and throughout the rest of his life he was able to express his ideas in that way alone. He was irritable, he was petulant, he was at times violent, and entertained various delusions and suspicions against members of his family, and, although practically helpless, was very troublesome. As I say, at the end of four years he

was committed to the Danvers hospital in very much the condition I have described, with complete hemiplegia of the right arm and leg. He seemed to understand spoken language and could read with some degree of comprehension. He was absolutely unable to articulate a word. He could write a very little with his left hand, but nothing connected or at all coherent. He was able to express his wishes by grimaces, groans, and gesticulations with his unparalyzed hand, and in the same way, to some extent, his varying feelings and emotions. Thus, through the nurse who was with him for a long time, he was able to express great indignation towards a number of his imaginary enemies, going into that with considerable detail and quite exhaustively. He would declare, for instance, to his nurse, that he would throw away his property rather than leave it to his sister, hitherto his favorite relative, and the one who had been most devoted to him through his illness. He managed to express the delusion that his brother, who was in fact a total abstainer, was a very intemperate man and entirely beneath his contempt, and to him he declared he would give nothing. Against the hospital officers he contracted various dislikes, although for myself he had a kindly feeling, I alone of the whole staff maintaining a cordial relation to him. He went on in this way for three years or more, occasionally expressing suicidal feelings, which I do not think were necessarily evidence of insanity, as he appreciated his condition pretty accurately. From being a ship's captain he found himself reduced to the level of a servant, and I think he very correctly concluded that he would be better dead than alive. He sometimes refused to eat, though it was never necessary to feed him forcibly. During one of these periods I told him I would send for the Roman Catholic priest, announce that he was about to fast, and give him opportunity to confess. His hatred against the Romanists was so strong that he at once began to eat, and for a long time I was able to get him to take a large quantity of nourishment by simply telling him that I would send for the priest whenever he began to fast. He was finally seized with gangrenous stomatitis, which proved to be his last illness, during which he refused all medicines and all food, and for obvious reasons the tube was not employed. On the second or third day of this illness he underwent a very striking mental transformation. All his former delusions against his relatives disappeared, and he expressed himself through his nurse as in perfect sympathy with all members of his family, particularly with his sister, whom, during all the time I had known him, he had abused. He was considerably agitated over something which the nurse could not at first make out. Finally the nurse asked him if it was concerning the disposition of his property, and he said it was. The nurse asked him if he wished to give it to his mother. He said "No." When asked if he wished to make over his entire property to his sister, he at once said that was what he wished to do with it. She was the one who really deserved it and the one to whom he would have wished it to go if he had not been insane. He then appeared troubled by something else which his nurse could not make out to any extent. He went through some feeble gesticulations. The nurse asked him if he wished to speak about the disposition of his remains after death in case he should die. He said "Yes." The nurse said: "Do you wish to be examined after death?" and he said "No." The nurse said: "I will consult the physician and tell

him that it is your wish that you should not be examined after death. I think that your request will be granted and that your remains will not be disturbed." He expressed complete satisfaction on that point. He was again discomposed after a few hours. The nurse finally succeeded in ascertaining that, owing to his emaciated condition, having been formerly a very handsome man and very well nourished, he wished nobody to be present when his remains were prepared for burial except the nurse who had been his constant companion, as he feared others might ridicule his appearance. This point having been settled to his satisfaction, he folded his sound arm across his chest, closed his eyes, and peacefully breathed his last.

I have always been a great deal perplexed to know what I could have said in this case, or what I could say in a similar case, as to the testamentary capacity of the individual. It always seemed to me that this man, although he had been evidently insane all these years, and much demented during the greater part of the time, at the time when he made the disposition of his property made precisely the same disposition of it that he would have made had he never had his attack of hemiplegia. The intrinsic character of the act was absolutely sane, and the disposition of his property under those circumstances should have been regarded as a sane and sound disposition of it. Of course, I cannot say what the result would have been if he had recovered from the physical depression of his last sickness, but for the time his mind was practically clear, and the disposition of his property, like the disposition of his remains, appeared to be in all essential respects a perfectly logical and sane arrangement.

His refusal of medicine and food, it seems to me, in view of his actual condition, were both sane acts. He knew that he would never be well again, as he expressed it, and logically concluded that death should be preferred to a continuation of such an existence.

On the subject of aphasia, I don't know whether a personal experience is worth much, but in my own case some years ago I had an attack, temporary in duration, of amnesic aphasia, and inasmuch as I remember perfectly well every thing that occurred, it would seem to me that perhaps a short account of the attack might be worth relating. I had been engaged, when a young man, in a running race on a very hot day, at the end of which, feeling much exhausted, I went to get a drink of water. I had no conception whatever that I was in any unusual nervous condition when I started to ask for the water, but with the words "Please give me a drink" clearly in my mind, I found myself uttering strange and unusual words and phrases, having no relation to my desires, something extraordinary and not altogether agreeable. I then tried to ask for water without using those words, trying to put the question in some other form, but without success for about fifteen minutes, at the end of which time I recovered the power of speech and had no further trouble.

A friend of mine, a lawyer, was some years ago, at the commencement of his professional career, appointed referee in an important railroad suit. The respective lawyers, most eminent men, were far more versed in the matters of law in dispute than the referee, which greatly embarrassed him. He was unable to obtain a stenographer, at least for some reason he did not have one, and took down the evidence himself for three or four days, a very laborious

work. He found to his amazement, on the third or fourth day in writing the evidence, that whenever he came upon the capital letter "S" he was entirely unable to write it. For two days longer he continued the hearing in this case perfectly well, his decisions being afterwards sustained in the higher court, and during all that time he was unable to make use of the capital letter "S." He understood this perfectly well and left a blank space for the letter which he afterwards filled in. When the hearing was over and the stress of it had abated, my friend had an attack of unconsciousness lasting a short time and was confined to bed for three or four days, after which he regained his usual condition. Whether or not in this case the convolution of Broca was incidentally congested or anæmic and its usual functions thus impaired during an unusual mental stress, nobody, of course, could say. One theory in regard to that matter is probably as good as another theory.

I have often been struck in post-mortems I have made in cases of general paralysis with the very much more extensive degeneration of the convolutions of the brain other than the convolution of Broca, in which the aphasic conditions in life had been very well-marked. Just what explanation could be given in such cases I don't know. Of course the theory of Brown-Séquard of the inhibitory action of one part of the brain over another, and perhaps distant part, is a matter of theory; it may be a matter of fact. I think this theory would explain them so far as a theory might go.

In regard to other matters relating to the speech of the insane, I confess I do not know much more than the history of several cases with which I will not weary you this evening. These speech phenomena are extremely interesting and deserve careful and exhaustive study, and I trust the work so well begun by Dr. Kellogg will be continued by him for our future benefit and instruction.

In the absence of Dr. H. E. Allison his paper on the "Motives which Govern the Criminal Acts of the Insane" was read by Dr. Blumer.

The PRESIDENT then announced the next paper on "The Care of the Criminal Insane," by Dr. Long.

Dr. LONG. I am very glad to congratulate the members of the Association present, that you will not be obliged to listen at this late hour to a paper from me, as I have none prepared, but as my name occupies a place on the programme I feel under obligations to say a few words, and I wish to state that it was at so late a time when I notified Dr. Brush that I would present a paper I found it impossible to fulfill the promise. I wish to say also that I did not expect to offer any ideas that would enlighten the members of this Association, but I hoped to have the subject reviewed and discussed to that extent that we might know the opinion of a majority of the members of the Association as to the advisability of caring for this class of the insane in institutions separate from those for the care of the non-criminal class. So few States have made provisions for the separate care of the criminal insane that when appropriations are sought for this purpose, legislators are apt to consider that it is an attempt on the part of those in charge of a general asylum to rid themselves of a troublesome class of patients.

I am emphatically of the opinion that the patients in hospitals for the insane who are not criminals should not be forced to associate with the crim-

nal insane, as they certainly shun such associates in their home life. That the convict insane should be removed from the environment that is often a prominent factor in the causation of their condition, and placed in a hospital for the care of the insane, appears to me to admit of no question; but if transferred to a general hospital for the insane their presence is objectionable for many reasons, among them being the forced association of persons innocent of any crime with the most hardened criminal. Then too the liberty of all patients in the institution is restricted because of the propensity of the criminal, and such advantages as "open door wards" cannot be made use of. Numerous reasons could be cited, but those mentioned are sufficient.

I wish to refer to mistakes liable to be made in locating and designing institutions for the criminal insane. If I am not mistaken, but three States have provided asylums for the criminal insane; these are New York, Michigan and Illinois. New York and Michigan both made a mistake in locating; both built adjoining a prison. New York has just completed a Hospital for the Criminal Insane away from any of the prisons, and in Michigan we have taken steps looking to the abandonment of our present building for asylum purposes because of its objectionable location. The close proximity to a prison, I am certain, retards, if not prevents recovery in some cases, notably those of melancholia, environment in many of these cases being the chief cause of the patient's condition, and moral influences having much to do with recovery, the full effect of these cannot be obtained so long as the patient is in a building contiguous to the one in which he was incarcerated.

I will say a few words upon the subject of designing or constructing buildings for the care of the criminal insane. Illinois recently constructed a building for this purpose which is a good illustration of the errors that may be made. The building, I am informed, was designed by a member of the State Board of Correction and Charities, a person who probably has had little experience with the insane, and probably consulted no asylum superintendent. The plan of the building is much like that of a prison. There is a central building or rotunda with wings or "cell blocks," (for they are nothing more,) extending from the rotunda in different directions.) The Superintendent's office is located in this rotunda, that he may be enabled to look down any of the corridors and see the patients and attendants at the same time that he is performing other official duties. Patient's sleeping-rooms are arranged in tiers, three in hight, with grated doors. This makes a very undesirable building as a hospital for the insane. My experience warrants me in saying that buildings for the criminal insane should be constructed in no way different from those for the ordinary insane, except in the way of some precautions for security; it is necessary to securely bar windows; good locks are necessary on doors, and the doors should be extra strength, but in no case is it necessary to have grated doors. Where vigilance is used in preventing patients from secreting tools or weapons in their rooms there is little danger of elopements from the interior of the building.

In constructing for this class of patients it will be found advantageous, if not a necessity, to provide a so-called airing court, as any other method of giving a patient the benefit of exercise in the open air is too hazardous in case of those who are serving a long sentence and for whose custody the superin-

tendent is responsible. Unlike the convalescent patient in the general asylum the convalescent criminal is the most troublesome and causes the superintendent the greatest anxiety; he becomes capable of exercising all of the cunning usually possessed by the criminal, and with the knowledge that instead of returning to his home and friends he will be returned to a prison cell he is constantly on the alert for an opportunity to elope, and the opportunities would be numerous if outside an enclosure. Thanking you for your attention I will say no more. [Applause.]

The President, Dr. ANDREWS. I have been requested to omit the reading of the obituary notices and to substitute for these the paper of Dr. Page. The obituary notices will be read in the morning and also at that time a paper by Dr. Skene, of Brooklyn, will be read, which was to have been read day before yesterday, on the subject, "The Surgical Treatment of Insanity, Epilepsy, &c." It is a very interesting paper.

At the close of Dr. Page's paper on the "Adverse Consequences of Repression," the President, said: The hour is so late that I would not suggest any remarks upon the Doctor's paper, but to-morrow morning there will be an opportunity for any remarks that are to be made upon it.

Dr. GODDING. If it meets the views of the Association, the Executive Committee would respectfully suggest that we meet at ten o'clock to-morrow morning, instead of 10:30, as down on the programme. There is a great deal of work to be done and we think it advisable to call the meeting a half hour earlier than at first intended.

On the request of the President the Secretary then again read the list of officers elected. The President requested that the officers of the Council remain after the session.

On motion of Dr. Brush the Association adjourned at 10:35 until Friday morning at 10 o'clock.

The Association was called to order Friday, May 6, 1892, at 10:15 A. M., by the President, who announced the first paper of the session, by Dr. Preston, on "Sexual Vices—Their Relation to Insanity, Causative or Consequent."

Dr. GODDING. I think Dr. Preston's paper a very valuable one, and but for the lateness of the hour, I, for one, should be glad to discuss it. Looking at the question of treatment, I wish to say that the Jewish population, in my experience, are much less subject to this trouble, and that circumcision certainly is a good thing as a retarding, preventive treatment in these cases. The blistering collodion, in the case of male patients, has no risks; we regard it as the oil of joy in the cases of those patients who so often become frenzied by their indulgence in this habit. It is really a question of what will cure dementia in the majority of cases.

The paper of Dr. Skene, on the "Surgical Treatment of Insanity, Epilepsy, &c.," (see page 238,) was read by Dr. Brush, who said: Mr. President, I wish to say that this paper was sent to me by Dr. Skene, but it was, unfortunately, sent to me at the Sheppard Asylum and consequently did not reach me in time for the discussion that took place the other day. It has been forwarded to me by my assistant, and I would suggest that it be printed in the transactions in connection with the discussion of which it was to form a part.

After the reading of Dr. Skene's paper, the President, said: Owing to the lateness of the hour we will not enter upon the discussion of this paper, unless some gentleman is very anxious to make some remarks upon it; but will call for the reading of the obituary notices from the gentlemen who are present. Dr. Stearns has, I understand, an obituary notice of the late Dr. Draper, and if there is any other gentleman here who has an obituary notice we will call upon him.

Dr. STEARNS read an obituary notice of Dr. Draper.*

Dr. ANDREWS. Is there any one prepared to read an obituary notice of Dr. Gundry?* I believe it has been prepared by Dr. Hurd, who is not here this morning.

An obituary notice of Dr. Bancroft, I understand, was to have been prepared by Dr. Draper, and it was supposed at the time of the designation, of course, that he would be here to read the notice. It is not necessary for me to make any further comment than to say that it only shows how much uncertainty is attached to our affairs here that one who had been appointed to read an obituary notice of his fellow-member and associate should have his own obituary notice read to-day.

Dr. GODDING. The fact has been correctly stated, and Dr. Charles P. Bancroft, the son, has left the room. It seems to me proper to say that possibly false delicacy, on the part of the committee, prevented their referring the matter to some neighboring superintendent, and I would, therefore, move that the Council be requested to ask Dr. Charles P. Bancroft to prepare a suitable notice of his father's death.

The motion was seconded by Dr. Brush and carried.

Dr. Curwen read an obituary notice of the late Dr. Shultz as follows:

SOLOMON S. SHULTZ, M.D.

Solomon S. Shultz was born in Washington township, Berks county, Pennsylvania, on July 5th, 1831. His paternal ancestor, Christopher Schultz, had settled in that part of Pennsylvania in 1734, having been driven from the province of Silesia in the then kingdom of Prussia by religious persecution. After a thorough preparatory education he entered Princeton college, and graduated from that institution in 1852, and in 1855 received the degree of A. M. After graduation he taught school for a short time, and then commenced the study of medicine with Dr. D. D. Detwiler of Montgomery county, Pennsylvania. In 1856 he graduated from the medical department of the University of Pennsylvania, and shortly after opened an office for the practice of medicine in Allentown, Pennsylvania. In 1857 he was appointed assistant physician of the Pennsylvania State Lunatic Hospital at Harrisburg, Pennsylvania, and discharged the duties of that office with exemplary fidelity until 1862, when he entered the army as assistant surgeon. He had made, while connected with the hospital, a trip to Europe, spending several months in visiting hospitals for the insane and other places of interest in different parts of the continent. The war broke out while he was in Europe. The news came as he was ascending Mount Blanc in company with some English tourists. They had partly ascended the famous mountain and had slept over

*See "Obituary," JOURNAL OF INSANITY, October, 1892.

night at the Grand Mulets, when another party of travelers coming up in the morning brought the news of the commencement of the American war. Dr. Schultz continued upward and accomplished what very few Americans could boast of, the ascent of Mount Blanc. He hastened home and, entering the army as acting assistant surgeon, he was subsequently promoted to be assistant surgeon and surgeon of Pennsylvania volunteers and assistant surgeon and surgeon of U. S. volunteers, and was in constant service in hospitals and in the field until the end of the war. He was attached successively to the 75th and 23d regiments of Pennsylvania volunteers.

He acted as surgeon in charge and executive officer successively of the general hospitals at Harrisburg, Pennsylvania; Covington, Kentucky; Madison, Indiana; and Columbus, Ohio, being also in the latter place superintendent of the hospitals.

In 1865 he resigned his commission as surgeon in the army and commenced the practice of his profession in Harrisburg, and was building up a successful practice, when in August, 1868, he was elected by the commissioners for the erection of the hospital for the insane at Danville superintendent He entered on his duties with characteristic earnestness and fidelity, giving the most devoted attention to all matters connected with the construction of that institution, and urged forward the work in spite of delayed appropriations, so that part of the building was ready for occupancy in 1872, when the first patients were admitted. He conducted all the complicated matters of that hospital in its construction and management in every way with singular fidelity, thoughtfulness and care, not only in regard to the welfare, comfort, happiness and restoration of the patients entrusted to his care, but in those parts of his duty which pertained to the administration of the trust in connection with the Commonwealth and the various communities from which the patients were sent to the hospital. He was a man of acute sensibilities, and as such was greatly annoyed and distressed by the reiterated attacks on his management of the hospital by those who knew little of his devotion to his duties and earnest effort to promote in every way the comfort and happiness of those committed to his charge.

These attacks, many of them malicious in every respect, added to the mental strain of conducting as successfully as he did a large hospital for the insane, undermined his health. He was preparing for a rest and relief in the hope of regaining his health, when an unusual accumulation of troubles and attacks depressed him to such an extent that he failed and died on the 27th day of September, 1891.

While resident in Harrisburg he united in the formation of the Dauphin County Medical Society, of which he was the first treasurer. He was also for a time recording secretary of the Medical Society of the State of Pennsylvania and delegate from it to the New York State Medical Society. On his removal to Danville he became a member of the Mentor County Medical Society.

He was an earnest member of this Association, regular in his attendance when his duties would permit, and always prepared in every way to do what he could to promote its interests and the objects for which it was established,

"As a truly devout man, Dr. Shultz's character shone most brightly. Descended from a long line of 'defenders of the faith,' he emulated them by

being faithful in every religious duty and an active churchman all his life. Wherever he located he at once connected himself with the church of his own denomination, and as an earnest and sincere Christian he ever joined to further the church work. He was a leading member of the Mahoning Presbyterian church and one of its ruling elders, and as such often and ably represented it in the higher ecclesiastical bodies.

"A noble man, a devout Christian, he has gone to his rest and is now enjoying the reward of a good life."

He was married on September 27, 1872, to Miss Hannah L., daughter of Dr. William H. Magill of Danville, Pa., who, with two sons not yet grown to man's estate, survive him.

After an intimate personal and professional acquaintance of more than thirty years, the writer feels that in the death of Dr. Schultz he has lost a friend in every sense of that word. Kind, gentle, sympathetic, of few words but a warm heart, always ready to do what lay in his power for his friends, and for all who needed any help and counsel which he was able to give.

The following obituary notice has been prepared by Dr. Charles P. Bancroft of the New Hampshire Asylum:

Dr. Jesse P. Bancroft.

On the 30th day of April, 1891, Dr. Bancroft, one of the oldest alienists in the country, peacefully passed away. His last illness dated back a year and a half before his death, while presiding at a meeting of the New England Psychological Society. Although stricken with what he knew must be a serious if not fatal sickness, with heroic calmness and a characteristic presence of mind he put the motion for the meeting to adjourn and was carried to his hotel by tender hands. He gradually rallied and, though unable to enter into active work, never for a moment until the day of his death lost his interest in passing events or in whatever transpired in the specialty he loved so well.

Dr. Jesse P. Bancroft, son of Jonathan and Betsey (Parker) Bancroft, was born in Gardner, Mass., April 17, 1815. Like many New England farmers' sons of that day, he felt the yearning for a higher education, and not possessing the requisite means, was obliged to earn for himself by teaching and other methods the necessary funds for a collegiate and professional education. As is often the case, the earnestness of purpose and character developed by this early struggle were reflected through all his later life. He fitted for college at Andover, Mass., entered Dartmouth College in 1837, and graduated from that institution in 1841. He studied medicine with the late Professor E. R. Peaslee of New York, and graduated from the Dartmouth Medical School in 1844. During the period prior to his medical graduation, he was demonstrator of anatomy in Brunswick Medical School. In 1845 he commenced the practice of medicine in St. Johnsbury, Vt. He soon developed a large general and consultation practice, and during the twelve years he remained there acquired an extensive reputation as a practitioner and a high character in the community.

A growing interest in psychological study led him to look with favor upon a call made him by the trustees of the New Hampshire Asylum to become

superintendent and treasurer of that institution. On July 15, 1857, after much reflection and against the importunities of his numerous friends and patients in St. Johnsbury, he gave up general practice, and accepting the position offered him entered upon the special study and practice of psychological medicine.

Dr. Bancroft's subsequent life is practically identified with the history of the New Hampshire Asylum, with its early struggle and final success, and with the advancement of better methods in the care and treatment of insanity. In this latter particular he acquired not only local but national reputation. When Dr. Bancroft came to New Hampshire he found a general indifference to the cause of the insane, as well as a woeful lack of funds with which to develop the institution and supply proper remedial treatment for the patients committed to his care. He found, too, buildings constructed in the old rectilinear plan, admitting of little classification of the different classes of patients, poorly lighted and provided with imperfect ventilation and plumbing.

While studying the character of insanity and the varying needs of his patients, he very early became impressed with the urgent demands of certain classes of patients for special surroundings adapted to their mental condition and wants. He soon became convinced that the old architectural conditions had their limitations and were utterly inadequate to meet the requirements of individual cases. He recognized that each case of insanity must be studied by itself, and in order that every measure of treatment, medicinal and moral, might have its full effect, the environment of the patient must be so modified as to contribute to the end in view. All the interesting problems of mind, with its innumerable demands in disease, confronted him at this very time, while surrounded with perpendicular walls of stone and brick and with limited means at his disposal.

To this task of alteration of old construction Dr. Bancroft bent himself with untiring energy. By avoiding anything like useless expenditure, skillful financiering and judicious appeals to legislative committees, together with generous donations from individuals who recognized the urgent needs of the institution, he entered upon a successful plan of development and new construction that began soon after he assumed charge of the institution and terminated only with his resignation. With persistence he tore down brick walls, built innumerable ventilation flues where none had previously existed, projected bay windows admitting fresh air and sunlight, so that the old buildings, from gloomy, poorly ventilated structures, became sunny and cheerful. These fundamental requirements having been met, Dr. Bancroft entered upon a period of new construction. First, a building for excited women patients, then one for a similar class of men, and last a detached building for quiet and convalescent women patients. In all these different structures he recognized the importance of meeting the individual wants of different classes of patients, and of individual treatment for special cases.

The ideas which Dr. Bancroft practically carried out in the remodeling and in the new construction at the New Hampshire asylum, were embodied in all his reports for many years, in his remarks before the societies of which he was a member, and in a paper presented by him before the Association in

1889. He early departed from the opinions of many of his associates concerning hospital construction, and for several years maintained views on this subject that are receiving universal recognition at the present time.

Dr. Bancroft was a close observer and a diligent student. For this reason his opinion was frequently sought in his own and in adjoining States, both in consultation and in medico-legal cases. He gave to every case fair and impartial study, and never expressed an opinion until he had thoroughly surveyed the case in every aspect and demonstrated satisfactorily to himself the correctness of his position. He was most conscientious in the study of criminal cases where a plea of insanity had been raised. It early became a rule with him never to accept a position upon a case which he could not conscientiously maintain. He regarded the preservation of his own reputation and a strict adherence to a truthful, scientific presentation of the medical aspect of a case, of far more account than the acceptance of an expert's fee.

Dr. Bancroft was an eminently practical man, richly endowed with that greatest of all nature's blessings—good common sense. For this reason he made an admirable asylum superintendent. He carried all the innumerable needs of a large institution in his mind, and never allowed one interest to preponderate over another, but persistently labored until the ends that were of greatest practical benefit to his patients were fulfilled. His trustees learned to depend upon his good judgment and felt absolutely secure in the measures and methods recommended by him. Indeed, the continuous harmony that invariably existed between his trustees and himself was one of the pleasantest features of his long and useful management. By reason of this prevailing good sense, justice, firmness, courteous kindness and clear insight into the character of men, he was universally admired and respected by all his better employes, and for this reason retained a large number of such in his service for many years. His success as a hospital organizer, builder and manager, led the trustees of the McLean Asylum at one time to offer to him the superintendency of that institution. This flattering offer he felt obliged to reject, because he considered that he had made the development of the New Hampshire Asylum and the furtherance of the cause of the insane in New Hampshire his life work.

During the last few years of his life Dr. Bancroft took great interest in the subject of State supervision of the insane. For years he had been painfully aware of the fact that the State took little real interest in the condition and needs of its poor insane. He was among the first of asylum superintendents to join the National Conference of Charities. In 1880 he was appointed chairman of a committee and drew up a report containing many important suggestions on the treatment of insanity, which was signed by many men who had previously held divergent views. He labored strenuously to establish State supervision in his own State, and he lived long enough to see a State board of lunacy in successful operation, rendering infinite good to many unfortunate people who had the dire misfortune of insanity added to that of poverty.

Personally Dr. Bancroft was a man universally admired. In his own city his opinion was frequently solicited, and he held at various times positions of trust in the banking, charitable and educational institutions of the place.

He was a religious man, positive in his own convictions, but always charitable towards the views of others who might differ from him. The same simple, just and sympathetic qualities that made Dr. Bancroft so valued a counsellor in public and private affairs throughout the State greatly endeared him to his most intimate acquaintances and his own family, and to them, particularly the latter, his death brings an irreparable loss.

For several years Dr. Bancroft was professor and lecturer on mental diseases in the Dartmouth Medical School, and at the time of his last illness was a member of the New Hampshire Medical Society, of the National Association of Medical Superintendents of Institutions for the Insane, and president of the New England Psychological Society.

The following obituary notice of Dr. Armstrong has been prepared by Dr. S. H. Talcott, of the Middletown State Hospital:

In Memoriam. THEODORE SPENCER ARMSTRONG, M. D. Born May 11th, 1825. Died Sunday, December 27th, 1891.

A strong man has fallen at the post of duty. He experienced an ideal death, because, in the fullness of years, and in the richness of vast experience and praiseworthy achievement he went to his final reward without suffering a protracted prodrome of sickness and pain.

In making up the final record of a good man's life, we can do no better than to repeat the estimations of his value as made by those who were most intimately associated with him, and who knew him best. We, therefore, present the following:

"Whereas, It has pleased God in his infinite wisdom to remove by death our Superintendent, Dr. Theodore Spencer Armstrong, we, the Trustees of Binghamton State Hospital, desirous of expressing our personal regard for him as a man, also our appreciation of him in his official capacity, order to be placed on our minutes the following resolutions, and also order that a copy of the same be given to his family:

Resolved, That in the administration of the affairs of Binghamton State Hospital he has proven himself a competent, faithful and painstaking Superintendent. He was thoroughly devoted to all its interests, and was ever active in promoting its welfare and prosperity.

Resolved, That we recognize the fact that Binghamton State Hospital has taken rank among the foremost hospitals in the country. It has been highly favored in material prosperity; the location and surroundings naturally beautiful and attractive have been rendered still more so by his good taste and the skill of his master hand.

Resolved, That in our official relations we have found him ever ready to respond to suggestions and to carry out the wishes of our Board. He has left evidences of his superior administrative ability in this institution which time cannot efface.

Resolved, That we tender to his bereaved family our deepest sympathy in this their great affliction, and earnestly hope that they may find consolation in the knowledge that 'God doeth all things well.'"

It has fallen to the lot of very few men to become more useful to those around him, and more endeared to those who were his daily associates in the task of ministering to the sick than Dr. Armstrong. It has, we think, been truly said that the secret of his power over the hearts and wills of those

under him was summed up in a remark overheard in a conversation between two of the attendants. "We all loved Dr. Armstrong," said the young woman, "because he was good to everybody." There is a whole sermon in that simple tribute to the character and power of Dr. Armstrong. But beyond the natural and easy expression of goodness, which was one of the leading traits in Dr. Armstrong's character, we may note a lofty and continued purpose to do right, and to render justice to his fellow beings. Some are honest and just, yet severe in ther demonstrations of the fact; others are equally just and honest, yet blest with an inherent *suaviter in modo* which renders each act of courtesy at once a blessing and a benediction to its recipient.

Dr. Armstrong was a physician of excellent skill, and of wide repute. He was not only genial and gentle and lofty of purpose, but he was invincibly and persistently an advocate and an exemplar of all that is noble and honorable in the profession of medicine. He leaves not only a monument of good deeds in behalf of the sick in all classes of life, but he has likewise inspired a balmy memory in the hearts of numerous friends.

Our departed friend fulfilled all the duties of life, and sustained the truest of manly characters in both public and private relations until he neared the golden mile-stone of three score years and ten, and in his every act he set an example that may worthily be imitated by those who may come after him. He occupied the position of Medical Superintendent at the Binghamton State Hospital for about eleven years, and during that time he had the pleasure of seeing the institution grow from chaotic to crystallized conditions: and in the work of developing order and good discipline and salutary care for the large numbers of insane committed to his charge, his was the master mind and the guiding hand.

Concerning such a man, we may, I think, truthfully declare:

> "In sight of mortal and immortal powers,
> As in a boundless theatre,
> He ran the great career of justice;
> And 'mid the storms of passion and of sense,
> And through the changing scenes of time and chance,
> He held his course unfaltering."

Dr. CHAPIN. There remains to us the gracious performance of an act of duty. Recognizing in many ways the value of the long association and membership of Dr. John Curwen, and especially the important services he has rendered this body as a faithful secretary in the preservation of our records and archives during a period of thirty-four years—a service perhaps without a parallel in the history of similar associations; it is hereby

Resolved, That the thanks of this Association are due and are tendered to Dr. Curwen for the faithful performance of the duties of Secretary of this body.

Dr. GODDING. I wish to second this motion, and it seems to me that in reluctantly parting from our Secretary he has earned the right of repose from a service outlasting almost, if not quite, the time of any other member connected with this Association to-day. I have come to associate Dr. Curwen with the Secretaryship so much that I shall feel almost lost without

him. And I think it was due him that he should have this rest, and no more fitting token of approbation, it seems to me, could have been conferred upon him than the naming for the succession to the Presidency.

The PRESIDENT. Gentlemen: You have the motion to render a vote of thanks to Dr. Curwen. I know we will all respond heartily to that resolution.

The motion was then put and unanimously adopted,

A resolution was adopted, that the other obituary notices that have not been read be combined with those that have been read and published in the minutes of the Association by the Council.

The President called for the reading of the report of the meeting of the Council on the evening previous. Dr. Brush, as Secretary pro tem. of the meeting, reported as follows:

1. That the next annual meeting of the American Medico-Psychological Association had been fixed at Chicago upon the first Tuesday of June, 1893.

2. That Drs. Stearns, Blumer and Channing had been appointed a committee under the resolution of the Association to invite members of foreign medico psychological societies who are to be in Chicago upon that date to meet with the Association.

3. That Drs. Dewey, Brooks, Palmer, G. H. Hill and Hurd (ex-officio) had been appointed a Committee of Arrangements for the Chicago meeting.

4. That Dr. Cowles had been given authority to print 500 copies of the Constitution and By-laws of the American Medico-Psychological Association for distribution among the members.

5. That the Secretary of the Association had been authorized to take both sets of stenographic notes of the present sessions of the Association, and to prepare such publication of them as may be for the best interests of the Association, and to make the necessary expenditure to carry into effect this authorization.

On motion the action of the Council as above given was approved.

Dr. DEWEY. I would like permission to call up the letter of Dr. Prince, which was laid on the table, referring to his work on "Protection against Fire in the Institutions for the Insane," and would move that this letter be referred to the Council of the Association, with the recommendation of the Association, that the Council do what may be in its power to secure the introduction of this work as being a desirable publication for institutions for the insane.

Dr. Dewey's motion was seconded by Dr. Godding and carried.

Dr. BLUMER. If the Association please, I should like to take up the time of the members for one moment to introduce a resolution. I am authorized by Prof. Pepper, of the University of Pennsylvania, to call the attention of the American Medico-Psychological Association to the American Anthropometric Society. Many of the members have no doubt received circulars from Dr. Pepper, calling attention to the Society, whose object is to promote the study of cerebral anatomy, physiology and pathology. The complaint has been made by cerebral anatomists and physiologists that the brains that have been sent to them for investigation have been chiefly those of criminals, paupers and that class of persons, and that it is very desirable to obtain, if possible, brains of a higher type for profitable and systematic study. Mem-

bership in the Anthropometric Society consists of active and associate members. The active members are such persons as are willing to authorize their relatives after death to send their brains to Philadelphia for examination by this Society. Associate members make no such pledge, but are supposed to be in thorough sympathy with the Society and its work. Therefore, gentlemen, I have prepared the following resolution :

Whereas, The American Anthropometric Society has for its main object the systematic investigation of the human brain and in so far appeals to the good will of all who are engaged in the scientific study and treatment of mental diseases;

Resolved, That this Association hereby expresses its sympathy with the objects of the American Anthropometric Society, and bespeaks for it such coöperation on the part of American alienists as may lead to the advancement of a common interest and a worthy cause.

The resolution was seconded by Dr. Brush and adopted.

The PRESIDENT. Mr. Secretary, have you any communications on the desk? The Secretary responded that he had a letter which was addressed to Dr. Godding by a woman who was searching for a lost sister, and requested the aid of the members of the Association in obtaining trace of her.

Dr. GODDING. I may say, Mr. President, that this lady was at one time under my charge, and taken to a place in Virginia, she wandered away, and this poor, distracted sister has been searching for her ever since. Her name is Annie O'Neill. I thought it but right for the woman's distress to place it before you.

Inasmuch as you are going to Chicago for the meeting next year, I hope that in 1894 it will be announced that Washington is the proper place for the meeting, and that we shall see you here that year.

The PRESIDENT. I believe we are to meet in Philadelphia that year, to commemorate the fiftieth anniversary.

Dr. GODDING. I accept the amendment.

The PRESIDENT. Gentlemen of the Association: I thank you for your kindness and your courtesy to me while occupying the position of your president. It has certainly been a very pleasant duty to me, and I hope it has been a pleasant meeting to all of you. It has been my intention not to give any member cause for finding fault with the conduct of the Association, and if I have been successful in this I am satisfied with the result. I desire to congratulate the Association on the adoption of the new Constitution and By-laws, and also its new name. It seems as if we were now putting on a new suit after having outgrown and worn out the old one, and I hope that we shall immediately enter upon a new course of progress. We have in the new Constitution and By-laws some elements which will tend in that direction. The new organization will we doubt not expedite business, make everything harmonious and at the same time successful.

Thanking you again for your kind attention and your courtesy, I will close the meeting of the Association for this year, to be called together in Chicago on the 8th of June next. The meeting is now adjourned.

Adjourned at 11.40 A. M. Friday, May 6th, 1892.

J. B. ANDREWS, *President.*

JOHN CURWEN, *Secretary.*

TWO CASES OF BRAIN TUMOR.*

BY J. M. MOSHER, M. D.,
St. Lawrence State Hospital, Ogdensburg, N. Y.

The problem of the diagnosis of cerebral tumor involves the three questions of the determination of its existence, of its location and of its nature, and cases of cerebral tumor may be classified as those in which no indications of cerebral disease are discovered; those in which the presence of a neoplasm is ascertained; and those in which the diagnosis of the growth and its location are established. In some cases the nature of the pathological process may be discerned by the visible presence of the growth, especially carcinoma, when eroding and perforating the skull; in others by accompanying diathetic conditions, as tuberculosis and syphilis, and in still another class inference may be made from general considerations, as age or sex, statistics showing the relative greater frequency of glioma and sarcoma in males; tubercle in youth; cancer and gumma in adult life.†

Circumscribed disease of the brain is susceptible of diagnosis when perverting or destroying the activity of areas whose physiological functions have been determined; the nature of the process, whether tumor, abscess, local meningitis, encephalitis, or both, softening from plug or ruptured vessel, is demonstrable only by accompanying general symptoms.

Tumor presents no pathognomonic symptom or group of symptoms, the many manifestations and combinations of the mechanical effects of pressure, irritation and destruction affording clinical pictures of wide variation. The mental deterioration following implication of the frontal lobes is counterfeited by the results of general compression due to disease elsewhere, and has only indirect significance, unless accompanied by abnormalities in the domain of sensation and motion.

J. E., female, married, domestic, æt. 32, was admitted to the St. Lawrence State Hospital April 3, 1891, with an imperfect history pointing toward primary organic disease of the, brain of

*Read at the Annual Meeting of the St. Lawrence County Medical Society, held at Gouverneur, N. Y., May 17, 1892.

†Gowers. *Diseases of the Nervous System*, pp. 869, et seq.

one year's duration. A maternal uncle was said to have been insane, and the father died of phthisis. The alleged exciting cause of insanity was impoverished living. The first symptoms were carelessness and untidiness, with gradual loss of mental power, manifested by stupidity. About six months before admission it was noticed that she dragged her feet when attempting to walk, and two months later she was unable to walk without assistance. No other statement was made at the time of admission except that she had a ravenous appetite, much greater than was natural to her, and that her weight had increased above what was usual for her. When admitted she was carried into the office. She was untidy and dishevelled; one shoe was off, and the reason was given that she had scalded the foot by upsetting a tea-kettle upon it. She did not answer questions, and had a vacant, stolid, indifferent expression. She arose to her feet with assistance and stood alone, but could not maintain her equilibrium with her eyes closed. She remained in bed until the date of her death, April 23, 1891, twenty days after admission. The clinical history during this interval was a simple record of helplessness, with variable degree of paralysis of the limbs and entire loss of control of the sphincters. The stupor became gradually more profound. Two days before death there was a sudden change for the worse; coma and stertor ensued, and she did not again rally. There were no convulsions.

At the autopsy, made twenty hours after death, note was made of the expressionless appearance of the face, not unlike the fatuous physiognomy of general paralysis. After removal of the calvaria and incision of the dura, the brain substance and pia-arachnoid protruded through the opening in the latter; the vessels were distended with blood, and the surfaces of the convolutions were flattened. A nodular growth, about the size of a closed fist, occupied the tip of the left frontal lobe. It was attached at the base to the pia mater; its free surface lay against the hemisphere, which was excavated to accommodate it. The tip of the lobe had disappeared; parts of all the convolutions remained, but were compressed. The excavation was backward and inward, and in the posterior wall of the cavity, thus formed, was the crescentic orifice of the anterior extremity of the lateral ventricle. The pressure extended toward the median line, and the right hemisphere was distorted and compressed. The inter-

ior of the tumor was a reticulated stroma containing vascular tissue more softened near the center than at the periphery.

Sarcomatous growths are often permeated by numerous thin-walled vessels, and rupture of one of these may have caused the crisis, which preceded by a few hours the fatal issue. Imperfect history and short observation of the case gave little opportunity for accurate clinical record or diagnosis.*

L. D., male, married, farmer, æt. 40, was admitted to the St. Lawrence State Hospital April 21, 1891. His father and mother were cousins, and a paternal aunt was insane. He had been intemperate and dissolute, was said to have had syphilis, and his insanity was alleged to be due to heredity and inebriety, the form being dementia with melancholia. He was blind at the time of admission, weighed 159 pounds, had a patch of tinea versicolor upon the breast, and his gait, possibly owing to his blindness, was slow and uncertain. His tongue was coated. It was stated that for several years he had been a constant and excessive drinker, frequently becoming intoxicated. About a year before admission he was said to have received a severe blow upon the head, and shortly thereafter his sight became dim, the failure of the left eye preceding the failure of the right by a few weeks. Total blindness resulted in about four weeks from the first observed symptom. He afterward had several attacks, called "dizzy periods," and his wife stated that he had had mild convulsive seizures which affected the right side and left it paretic.

*The results of destruction of the prefrontal regions by pathological lesions confirm the conclusions reached after experimental extirpation in animals. In remarks upon a case of tumor of the left frontal lobe, (*The Lancet*, June 4, 1892, p. 1,241), Dr. Ferrier summarizes these results as follows: "Destruction of the prefrontal regions in monkeys causes no obvious physiological symptoms, that is to say, no perceptible defects in the domain of motion or sensation, but the separation causes a mental degradation of a peculiar character, which may be characterized as due to the loss of the faculty of attention or power of mental concentration. Monkeys deprived of their frontal lobes, instead of being as before actively interested in their surroundings and curious as to all that came within the field of observation, became apathetic or dull, or continually dozed off into sleep, responding only to the sensations or impressions of the moment, or varying their listlessness with restless and purposeless wandering to and fro. Similar symptoms have been observed and recorded by many observers in connection with tumors of this region. It is not until the tumor presses backwards and directly or indirectly disturbs the functions of the central and posteriorly situated convolutions that motor or sensory symptoms declare themselves; and until these have occurred, or until there are signs of implication of the nerve or other structures in the anterior fossa, an accurate diagnosis of the position of the tumor cannot be made with certainty, inasmuch as loss of memory and impaired power of concentration may also be produced by diffuse lesions or diseases which cause general disturbance of the brain." See also ***Functions of the Brain***, p. 401.

About three months before commitment he became indifferent, careless, depressed and stupid; he exerted no control of the sphincters and resisted care, often refusing to be washed or bathed. At the time of admission he was quiet and coherent, answered questions with some intelligence, said he was confused and that he wanted to sleep a great deal. He expressed no marked delusions. Early in May he had an attack of nausea and vomiting, after which he was confined to his bed. He complained at this time of severe pain in the lumbar region extending down the right thigh to the knee, and this area was sensitive to pressure and upon movement of the body or limb. The pulse varied between 72 and 80, and the temperature only once rose to 100. Bowels sluggish; mind very dull. In the latter part of the same month an ophthalmoscopic examination, made by Dr. W. N. Bell, of Ogdensburg, revealed advanced atrophy of the papilla—the disc was a bluish gray, the arteries were very small and indistinct, and the veins injected. Patient stated that he suffered from pain in the left side of head and in the right side of body; in describing the pain he followed with his hand the left side of forehead and face, crossed the median line at the larynx, and passed down the right side and limbs. His headache became more severe, he was somnolent, and in June was semi-comatose for two days. His mental operations became slower and more confused; he hesitated in replying to questions and frequently required their repetition. At the same time he laughed childishly without adequate cause, and manifested a silly exhilaration and indifference. Tests of the senses of smell and taste were unsatisfactory. He often fell asleep while eating. His condition was one of progressive stupor with prolonged somnolence and helplessness, deepening into coma which continued until death, September 14, 1891.

Post-mortem examination was made of the head only. The skull-cap was irregularly thickened and hardened, and in the temporal region on either side was thin and transparent. There were no adhesions of the visceral dura to the calvaria, and when the latter was removed the dura was found to be dry and tense and pressed firmly out by its contents. On the right side the dura bulged more prominently than on the left, showing marked asymmetry. Over the right superior frontal convolution near its posterior extremity and from its upper surface projected a

small excrescence resembling in color and consistency the white matter of the brain; this tumor was covered by a thin layer of membrane continuous with the dura, and when the dura was removed the projection was torn from its pedicle, by which it was united with the cerebral substance. The hernia cerebri, thus formed, was about the size of a bean, and was one of the little protrusions resulting from intra-cranial pressure, which, when occurring in some numbers have been aptly termed by Clouston,* "cauliflower-like excrescences." The pia was stripped from a small area only, and no adhesions to the cortex were found.

In the anterior fossa was a large growth firmly adherent to the base of the skull. This growth was torn on attempts at removal, and when released it was lifted out with the brain and fell away from it. Its greater bulk *in situ* was on the right side. The inferior surface was attached to contiguous structures and centred at the sella turcica, which was excavated and eroded.

The pituitary body was imbedded or absorbed in the growth, and was not found. Fragments of the optic tract were discerned, but no trace of the chiasm. The inferior surface of the frontal lobes was disintegrated and softened, and partially excavated, so that its various structures could not be differentiated. The destruction involved all cerebral tissues anterior to the corpus callosum, and was noticeable in the genu of the latter, and in basal tissues as far back as the anterior perforated space. Behind this the brain was normal to the naked eye, except for the flattening of the surface, the distension of the lateral ventricles, and analogous conditions due to general compression.

The tumor was indurated, its surface nodular and irregular, and its interior revealed radiating bands of tough fibrous tissue inclosing a cellular substance, which was softened and partially broken down.

The adjacent structures affected by destructive enlargement of the pituitary body are the trunks of the second and third pairs of cranial nerves, and the inferior surface of the frontal lobes; continuous growth involves other important parts of the cerebral mass, the tumor occasionally extending to the Sylvian

Clinical Lectures on Mental Diseases, Am. Ed., p. 283; also *Journal of Mental Science*, Vol. XVIII, p. 153.

TO ILLUSTRATE "TWO CASES OF BRAIN TUMOR."

FIG. 1—Case 1. Shows tumor *in situ.*

FIG. 2—Case 1. Shows excavation of left frontal lobe and cresentic orifice of anterior horn of lateral ventricle.

FIG. 3—Case 1. The Tumor.

FIG. 4—Case 2. The Tumor.

(The illustrations were made from photographic negatives taken by Dr. P. M. WISE, to whom grateful acknowledgment is made.)

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

fissures, as in the case under consideration, or even inclosing the interpeduncular space and impinging upon the pons.

The classical symptoms of increased intra-cranial pressure—headache, vertigo, vomiting, optic neuritis and atrophy, convulsions, psychical disturbance, somnolence and coma, accentuated by the focal manifestation of crossed algesia and hyperæsthesia, and without elevation of temperature, made easy the diagnosis of cerebral growth. The complaint of peculiar distribution of pain suggests irritation of the sensory fibres emerging from the internal capsule of each side into the crura cerebri, or, more probably, affection of one of these tracts prior to its decussation, and of the trunk of the fifth nerve prior to its exit from the cranium.*

The pituitary body, dissociated from its morphological connection with the vault of the pharynx during development, is described as a "mass of round, or oval, or cylindrical alveoli, separated by septa of vascular connective tissue concerning the purposes of which we know absolutely nothing."† Its occasional enlargement by simple hypertrophy, new growth or inflammation, is not followed by a specific symptomatology, though recently recorded as one of the distortions of acromegaly. Frequent enlargement without this or analogous dystrophic conditions controverts the probability of ætiological relation.

In both cases there was an early irritative stage, often indicated by so slight change in mentalization as to escape notice, and lend fictitious support to the belief that the mind may remain intact when the brain is diseased. The period of excitement was followed by profound stupor, stolid, expressionless features, insensibility to psychical or physical stimulus and mental annihilation the characteristic effects of cerebral disintegration.

* See also *Report of Cases of Intracranial Tumor*, by Dr. Ross, *Brain*, Vol. III, p. 121.
†Foster, *Text Book of Physiology*, 4th Amer. Ed., p. 611.

ABSTRACTS AND EXTRACTS.

DENTAL ANOMALIES IN THE INSANE—A. di Lenzenberger, *Ann. Di Neurologia* IV, V and VI, 1891, reports the results of his investigations as to dental abnormalities in the insane in the provincial asylum of Naples, and found, taking the whole number that he could examine, excluding only perfectly toothless cases, that in one hundred male patients only sixteen, and in seventy-two female patients only seven, had perfectly normal dentition. According to Magitot, only about 9.3 per cent of ordinary individuals present dental anomalies, hence it would appear that they are nine or ten times more frequent in the inmates of an asylum than in the average population.

The average number of anomalies presented by each of the eighty-four men was 2.09, of the sixty-five women 2.34.

The greater number of variations from the normal was found in the direction of single teeth (54 in males or 64.3 per cent, 41 in females or 63.8 per cent,) and in the form (36 males or 42.9 per cent, and 57 women or 57.7 per cent.) The anomalies as regards number were less numerous, (13 males or 15.5 per cent, and 3 females or 4.6 per cent.)

As regards the points raised by Topmard and Belsanti, he found in his one hundred and seventy-two cases only three, or 1.98 per cent, presenting the ovoid form of the inferior maxilla; in all the others the rami were divaricating. He found, however, seven instances of a type not hitherto described, the lower jaw of a trapezoidal shape, the canines at the angles and the incisors arranged in a straight line anteriorly. These cases were not confined to the degenerative types of insanity, but included also the simple psychoses, hence it cannot be accepted as a positive degenerative or hereditary indication. There were two cases of obliquity of the lower jaw, and in seven, or 4.6 per cent of all the lower teeth, except the molars, were bent inward toward the center of the palate. This, following the principle of Magitot's nomenclature, the author styles aveolar opisthogenism, and he considers it a rather striking fact that it was most frequent in the degenerative psychoses, in which it occurred in 7.69 per cent.

Of the anomalies in single teeth, Lenzenberger found polydentia certain in one case and dubious in one. In the latter there seemed to be a rudimentary incisor between the two median ones. As regards congenital absence of teeth the anamnestic data were not altogether conclusive. Precocious appearance of the wisdom teeth occurred in five cases (2.9 per cent). Four of these cases were imbeciles, or idiots, and made up nearly one-fourth of the phrenasthenics examined. Late appearance of these teeth (after 24th year) occurred in six cases, three of which had normal cranial conformation, and these presented degenerative characters. Heterotopia occurred in 6.97 per cent of cases, most of whom presented other degenerative signs, such as plagincephaly, etc.

As regards abnormalities of form, the auther records cylindrical shape of the lower incisors in 7.55 per cent, suggesting in appearance the conical

teeth of the lower vertebrates. Short thick canines, without the central cusp, were noted in equal proportion. In twenty-one cases the second molar was notably greater than the first, none of these cases being altogether free from other abnormalities. In three cases the anomalous tubercle of Carabelli was observed.

The anomalies in the direction of single teeth were very numerous, and were met with in 61.02 per cent of the simple psychoses, in 59.61 per cent of the degenerative cases, in 29.41 per cent of the phrenasthenics, and in 46 15 per cent of the paretics.

The results as a whole are elaborately tabulated and appended to the memoir. H. M. B.

MICROCEPHALISM.—The following are the conclusions reached by Giacomini in a memoir, "*I Cervelli dei Microcefali*," as given in a notice by the *Annali Di Neurologia*, IV, V and VI, 1891.

I. In microcephalism the morbid process affecting ths organism is essentially located in the nervous system.

II. The deformity of the cranium is a result of the deficient development of the encephalon. There is, therefore, no *osteal* microcephalism, it is always *neural*.

III. Microcephalism is not limited exclusively to the brain proper, but extends to all parts of the central nervous system; we may speak properly, therefore, of microcephalism and microcromyelism.

IV. Microcephalism consists in an arrest of development of the central nervous system, occurring at various epochs of embryonal life.

V. The nervous system of microcephalics does not present pathological alterations that can be put in relation with the arrest of development.

VI. The brains of microcephalics all appertain to the human type, but differ according to the epoch in which they were taken. With the arrest of development they form a complete series extending from the normal adult brain to the anencephaly.

VII. In the conformation of the surface of the brain in microcephalics, beyond the arrested development, we find in the higher degrees other arrangements that constitute true animal-like resemblances that may be interpreted as facts of atavism.

VIII. Microcephalism cannot be utilized in favor of the theory of descendence, since it does not represent any historical period of human development; it shows nothing more than what has already been made known through other peculiarities of the human organism.

VERBAL BLINDNESS.—Dejerine Soc. de Biol, (*Abstr. in Bull. de la Soc. de Med. Ment. de Belg., No. 65,*) reported a case illustrating one of the varieties of verbal blindness, of which the pathology, hitherto absent, was indicated by the autopsy. In the complete form of this affection the patient is unable to read either print or manuscript and is likewise unable to write either spontaneously or from dictation, or does so only very imperfectly. This condition

very often accompanies other forms of aphasia, motor aphasia, paraphasia or verbal deafness. When occurring by itself it is due to a lesion of the left angular gyrus, the center for the visual memory of words.

M. Dejerine's case was one of verbal blindness with retention of the ability to write (uncomplicated verbal blindness). The patient, who was unable to read, wrote easily and correctly, the power of copying only was somewhat impaired. He could read after a fashion by the use of his muscular sense; tracing the contours of the letters with his finger he was able to make out letters and words.

The anatomical location of the lesion in this form of verbal blindness had hitherto been undemonstrated. Wericke had made the suggestion, however, that the centre for the visual images of words should be intact, and that the lesion ought to be such as to cut off its connection with the central terminations of the optic nerves. This was found to be the case in Dejerine's patient; the lesion was located in the common visual sphere, (cuneus and occipital gyri,) and separated it from the angular gyrus.

H. M. B.

THE BLOOD IN MENTAL DISORDERS.—Krypiakewicz, *Semaine Méd., 1892*, (Abstr. in *Bull de la Soc. de Méd. Mentale de Belgique*, No. 65,) has examined the blood in many cases of mental disease with special reference to the presence of eosinophile cells. The majority were cases of general paralysis in all its stages. The author never found any increase in the number of these cells, but almost always found an increase of leucocytes. The same results were observed in cases of secondary dementia. In a case of climacteric insanity, with erotic ideas, the eosinophile cells were considerably increased. The same was the case with a young man affected with sexual mania. The quantity of hemoglobine is very frequently lessened in psychoses; there is found besides a pronounced poicilocytosis. Anæmia is especially marked in cases where the primary psychosis is rapidly followed by a secondary dementia; it is in proportion to the intensity of the disorder, and has a certain prognostic and therapeutic importance. H. M. B.

THE COURSE OF THE VISUAL FIBRES IN THE BRAIN.—M. and Mme. Dejerine have studied the course of the intra-cerebral fibres, especially those concerned in vision, and report that they have found in all the cases of hemiopia due to lesion of the cortical visual centres that they have examined, three in all, a focus of softening in the knee of the corpus callosum. This they claim to be the location, therefore, of the commissural connection between the two visual centres which is physiologically necessary for the association of visual impressions from one to the other. H. M. B.

THE TESTICULAR JUICE.—In two recent communications made to the Academy of Sciences, Paris, in May last, (rep. in *Le Progrès Méd.*,) M. Brown-Séquard reported further favorable results with what has been popularly know as his elixir of life. He claimed anew that this treatment caused in-

crease of muscular power and general physical well-being as well as renovation and strengthening of the mental powers. It is therefore to be considered as an energetic excitant of the brain and muscular system.

He also related his experience with it in tuberculosis and in locomotor ataxia. In the former disease he had found that after continued treatment with this agent the fever and night sweats disappeared, also the cough, and the strength and bodily weight increased. He could not, however, claim that these results are lasting. As regards locomotor ataxia he reported a case cured by a short course of hypodermic injections of this extract. He affirms that the testicular extract is an efficient tonic for the debility of old age, and that it is also a powerful agent in aiding convalescence in certain other morbid conditions. As proof of its effects he cites himself, at the age of seventy-five, able to show a muscular test on the dynamometer of forty-five kilograms, while strong vigorous men do not ordinarily exceed forty or forty-one kilograms.

At a subsequent session on June 7th, M. Brown-Séquard again brought up the subject. After stating the good effects of the treatment in tuberculosis cases, he claimed that it had been followed by better results than any other in locomotor ataxia; that M. Suzan had by it caused the disappearance of nearly all the symptoms in five cases of lepra, and that excellent results had been obtained with it by different physicians in the treatment of certain forms of mental alienation. Its tonic effect could therefore be claimed as established, but how is to be explained the disappearance of certain symptoms in addition to this. It is easy enough to understand how in tuberculosis subjects the renewal of the nervous strength causes the disappearance of the reflex morbid symptoms and the improvement of nutrition, and the same may be presumed to be the case in the other disorders. It may be admitted also that in the microbic disorders, the germs that cause the morbid symptoms are destroyed or favorably modified, either directly or indirectly, and through the influence on nutrition. The conclusions deduced from the facts by M. Brown-Séquard are as follows: (1.) In senile cases, when the spermatic glands have notably failed functionally, the injections of the testicular liquid may supply a want as regards the power of the nervous centres. (2.) In all diseases weakness may be combatted advantageously by injections of the testicular liquid. The cases in which it is of greatest value are the pulmonary tuberculosis, tabes, lepra, anæmia and paralysis.

In a communication made June 13th, M. Brown-Séquard stated that the danger of the injections of liquid extracts of animal organs was over-estimated and that it was obviated by sterilizing them by means of carbonic acid at high pressure in Arsonval's alumina filter. The conclusions of his paper were:

(1.) Liquid extracts of all glands and other parts of the organism, passed through the alumina filter of Arsonval, may be injected under the skin, even in considerable quantity, with perfect safety.

(2.) Experimental parts, in accordance with clinical observations, demonstrate the curative power of hypodermic injections of thyroidean extract in cases of grave disorder dependent on lack of action of the thyroid gland.

(3.) There is reason to believe, from the results of our experiments, that

death in disease of the supra renal capsules may be delayed, if not absolutely prevented, by injections of the liquid extracted from these glands of animals in good condition. H. M. B.

SPERMINE.—Apropos to M. Brown-Séquard's communications comes an article in the *Gaz. Méd. de Paris*, July 23, 1892, by M. Alexandre, the chemist who furnished the material for the physiological and clinical experiments of Tarchanoff, Rosehtchinin and others on the effects of spermine. M. Poehl shows that there has been a misapprehension as regards the identity of this substance, that it is not identical with ethylenimine, and that its chemical formula is not as given by Schreiner, $C^2\ H^5\ N$., but is really, when pure and separate from its crystalline phosphate, $C^5\ H^{14}\ N^2$, or possibly even more complex, as is suggested by the analysis of its chloroplatinate. The polymere of ethylenimine, piperazidine, ($C^4\ H^{10}\ N^2$), cannot therefore be properly called *dispermine*.

The physiological action of this substance seems to be practically the same as that of the extract used by Brown-Séquard, and M. Poehl finds its explanation in the fact that while it is not itself an oxidant, it accelerates oxidixation by its contact, both in a physiological and chemical way. If a few drops of chloride of gold are placed in a vase with some magnesium powder there is produced only hydrogen gas and a little chloride of magnesium. If, however, a little chlorohydrate of spermine is added to the gold a large amount of hydrate of magnesia is produced and a strong odor of human sperm is given off. The chlorohydrate of spermine, in dilution of $\frac{1}{100}$ to $\frac{1}{1000}$ or even $\frac{1}{10000}$ produces the same effect, and the solution filtered to separate the magnesia is also effective. The chlorides $PtCl^4$, $HgCl^2$, $CuCl^2$, &c., act in the same way. In this reaction the spermine favors by its contact the rapid oxidation of the magnesium at the expense of the decomposition of water.

The same is the case with the organic oxidations. If a little chlorohydrate of spermine is added to blood, much diluted or even a little decomposed, it oxidizes in the air very rapidly with tincture of guaiac, which turns blue in its contact as with oxygenated water.

It is well known that many substances, chloroform, oxide of carbon, protoxide of nitrogen, biliary and urinary extracts, &c., diminish the oxidizing power of the blood. The addition of a little spermine to the blood thus treated restores its oxidizing power. This action of spermine suggests very closely that of catalysis; it is not dependent on the quantity employed, and there is no change in the blood to spectroscopic tests.

This property of exciting oxidation by its mere contact serves to explain the good effects of spermine in chloroform poisoning, &c.

In order to estimate the intensity of the oxidizing process provoked by spermine, M. Poehl measured the proportion existing in the urine between the total nitrogen excreted and the nitrogen of the urea. He found that in certain cases, under the influence of spermine, this proportion approached equality and passed from 100.87 to 100.96.

The favorable action of this substance, reported in diabetes, is explainable by the diminution in this disease of the normal quantity of spermine produced

by the pancreas. The researches of M. Lepine and of Minkowsky have shown that diabetes is directly connected with alteration of the pancreas.

The action of spermine is rightly called tonic nervine, since it accelerates oxidation, and restores to the blood its power to transport oxygen to the nerve-elements. Hence the more rapid oxidation of the leucomaines, the complete removal of extractive matters, and the general feeling of well being experienced by all the subjects of its action.

The conditions that may cause the diminution of the secretion of spermine are numerous. Not only may the organs that produce it become altered, as is the case in various disorders, but it may be eliminated too rapidly, transformed into insoluble phosphates, &c., as in bronchitis, asthma and anæmia.

Since it is a constant element of normal blood and of many of the tissues, its administration seems to be without danger, as is claimed by M. Poehl, if made with purity and properly sterilized. The injections are said to be only slightly painful, if at all. H. M. B.

Etiology of Tabes Dorsalis.—The following are the conclusions of a lecture on the etiology of tabes, delivered by T. F. Raymond, at the Hospital Lariboisiere, *Progrès Méd.*, No. 24, June 11, 1892:

Tabes dorsalis is a disease of adult life, which rarely begins in youth or in old age, and which is notably more common in the male than in the female.

Congenital neuropathic predisposition undoubtedly has a share in its development, but it is altogether exceptional that tabes is produced through direct heredity.

A certain number of cases are known in which exposure to cold or damp, forced marches, venereal excesses (coitus standing), and severe injuries, have been, apparently at least, the exciting causes of the appearance of the disease. But the number of such cases is insignificant compared with those where tabes has developed after syphilis, and often without any apparent exciting cause. It is demonstrated to-day that the great majority of patients suffering from this disorder have had prior syphilis. It has not been proved, but it is extremely probable, that syphilis plays a part, directly or indirectly, in the development of tabes when it appears in syphilitic subjects.

It is certain that the intervention of syphilis is not essential for the development of tabes: the proof of this is the rare instances of syphilis contracted by subjects who already presented the symptoms of locomotor ataxia, before the syphilitic infection; and yet it is necessary that we should take into account the possibility of syphilitic re-infection. H. M. B.

Case of Traumatic Neurosis—Dr. Coester (*Berlin Klin. Wochenschr. Aug.* 1, '92.) describes the following case under the above heading for lack of a better. A workman, æt. 17 years, got the ungual phalanx of one of his fingers crushed; it was but a slight accident, but accompanied by a certain amount of mental shock. He went to work as usual, but on the day following the accident noticed that he could not appreciate the temperature of water with the right hand and arm, nor feel the warmth of the stove in the

right hand. Later patient found that he had no sensation of cold on applying the right side of his face to the window pane, and that the same was wanting in the right side of the chest during washing.

A small abscess formed at the seat of injury: it was opened and the wound healed. Dr. Coester first saw patient eight weeks after the injury. He was then to all appearance perfectly well, as regards general health. It was especially noted that he exhibited no psychical defect. He made light of the affection. Simulation was out of the question. There was found complete anæsthesia and analgesia of the skin of the right arm and right side of breast, neck and back, and in the face and head on the right side, corresponding to the distribution of the trigeminus. Temperature sense was lost in the parts enumerated, the patient not being able to distinguish between hot and cold objects; he could not appreciate pricking with a needle in these parts, and felt nothing when a strong faradic current was applied to them. The electrical reactions were the same on the two sides; motor power and muscular sense were unimpaired in the right arm, which was in a normal state of nutrition. In this case disease of the peripheral nerves and spinal cord could be excluded with considerable certainty, and there was no reason for supposing an organic affection of the part of the brain concerned. The author considers that the most reasonable diagnosis is that there existed a functional disturbance of a limited portion of the "psychosensory sphere." The case, in fact, was one of traumatic neurosis. It serves to illustrate the profound effect which a trifling injury may have upon the brain. Tho sensory disturbances disappeared after six weeks treatment with the faradic brush, a pretty strong current being employed. E. G.

Statistical Contribution to the Syphilis-Tabes Question.—Dr. Minor. (*Neurologisch. Centralbl. 1 July*, '92.) This paper is a continuation of a former one by the same author, and presents the results of a statistical inquiry into the frequency of occurrence of syphilis and—in association therewith—of tabes and general paralysis in Russians and Jews respectively. The present figures agree with those formerly obtained, and bring out the following points: Syphilis occurs five times more frequently in Russians than in Jews, both tabes and general paralysis also occur five times more frequently in the former. These results furnish an additional argument for the intimate connection between lues and the disorders mentioned. The author's inquiry embraced a considerable number of cases. In concluding this article he asks whether the occurrence of a hard chancre is possible in a case of tabes or general paralysis, or whether such has been observed. He has not himself read or heard of a case. Those who adhere to the doctrine "omnis tabes e lue" would have to admit, in a case of tabes presenting a hard sore and secondary symptoms, the cure of the original syphilis and a re-infection.

E. G.

The Symptomatology of Graves's Disease—In the *Neurologisch. Centralbl., 15 July, 92*, Professor Homén draws attention to two symptoms of this disease which have attracted but little notice. The first is intermittent

swelling, attended with pain in the region of the joints. This supervenes suddenly without apparent cause, and disappears as rapidly, sometimes within a few hours. There is no redness in the part affected, and no fluctuation; movement is not impaired in any noteworthy degree. The knee is commonly affected, but the elbow or hip joint may be involved, and on each side. In an early period of the disease the swelling and pain may be so marked that ordinary rheumatism is suspected, especially where, as is sometimes the case, the duration of these conditions is somewhat prolonged. The other symptom referred to consists in a fine, rapid tremor, of uniform rhythm, which appears in the upper lids almost immediately the eyes are closed. Occasionally it is broken by a rather strong convulsive movement or a short pause. This tremor differs from that observed in the same parts in nervous people; the latter does not supervene immediately upon closure of the lids, is not so fine, uniform or continuous as in Graves's disease, in which condition tremor of a like kind can also be observed in other parts of the body, especially the hands. Out of thirteen cases observed by the author, the fine tremor of the lids was noticed in eleven; in five it was well marked and always present, (on closure of lids,) in six the rhythm was broken and the movement not invariably present. In two cases the tremor was wanting. E. G.

Case of Congenital Facial Paralysis—Schultze (*Neurologisches Centralbl. July 15, '92.*) comments upon the rarity of this condiiion, excluding cases occurring in the act of birth. An isolated facial palsy does not, indeed, appear to have been recorded. Moebius states that paralysis of the facial nerve has only been observed in conjunction with oculo-motor paralysis. In the case now recorded the only evidence of oculo-motor complication consisted in a slight dilatation of the pupil on the affected side. It should further be noted that there was slight nystagmus or movement of the eyes. The affection was noticed immediately after birth, which was in all respects normal. The picture presented was that of a wide-spread, typical, left-sided facial paralysis, with extinction of electrical reactions in the parts affected. With the exception of the ocular conditions noted, the child was in all other respects normal. The cause of this palsy and the seat of the lesion are quite problematical. E. G.

Hysterical Aphasia.— Ladame (*Centralbl. f. Nervenheilk. u. Psych., June, 1892,*) reports a case of this affection. Patient—a woman—had a "nervous crisis," in the course of which, according to the husband, "nerve shocks" were to be observed in the right limbs. Thereafter she completely lost the power of speech; there was motor aphasia accompanied by aphonia. No sensory aphasia. In addition, patient had complete right hemianaesthesia, complete deafness on the right side and impaired vision of the right eye, with narrowing of its visual field. Pharyngeal reflex abolished. There was a clear history of hysteria. On the evening of the day following patient received a shock, a quantity of glass being upset and broken in her presence. Thereupon she suddenly recovered her voice; the hemianæsthesia passed

away, the pharyngeal reflex returned. Patient—a grown-up woman—had had a similar attack of mutism in her youth. She had gone to bed much fatigued; on waking the following morning she was surprised to find herself mute, and paralyzed in the right arm and leg. These conditions persisted for eight months. Then speech began to return, little by little, but patient found that she had completely forgotten French, which she formerly spoke fluently. She retained command of German. It was necessary to relearn French systematically. Ladame, in conclusion, dwells upon the necessity for cautious diagnosis in these cases of hysterical mutism, in order that simulation may be excluded. E. G.

THE OPERATIVE TREATMENT OF EPILEPSY.—Dr. Kümmell (*Deutsche Medzin. Wochenschr., 8th June, '92,*) gives an account of personal experience in this subject. He tied the vertebral artery on each side in two cases, but in neither was the improvement in the nature and number of the epileptic seizures more than temporary. With Alexander (Liverpool) he is disposed to ascribe such modifications of the fits as have been observed after this operation to the compression by the ligature of the fibres of the sympathetic, which lie upon the vertebral artery, whereby the connection between the superior cervical ganglion of the sympathetic and the "surface of the brain" is broken. The author has also extirpated the ganglion mentioned in one case, but the result was not encouraging, only very transitory improvement following. He has further trephined the skull in several cases of genuine epilepsy, without history of injury, and in which nothing as regards a motor lesion could be inferred from the nature of the convulsion. The only localizing indication in these cases was a painful point on the skull, chronic and unvarying in site. After trephining over the seat of pain there was temporary cessation of the fits and an undoubted improvement in the mental condition of the patient, but no cure was ever obtained. On the other hand, the author has trephined in cases of Jacksonian epilepsy with success, the fits entirely disappearing. In these cases after excision of portions of bone, dura, or cortex which appeared diseased, the disc of bone was replaced ere the skin-wound was dressed. In conclusion is reported the case of a degraded idiot, æt. 3 years, which was unable to walk or even stand, and upon which all attempts at education were wasted. It suffered from epileptic convulsions, which involved the face and also the extremities. On the back of the head, below the lambdoidal suture, a deep impression could be felt, which, there was reason to believe, was the result of delivery by forceps. A portion of bone the size of the palm of the hand, which included the depression mentioned, was temporarily removed. On its inner surface, corresponding to the external depression, was a bony projection which had produced a deep impression on the brain. This was chiselled off. The dura was opened, but no account of it or of the brain beneath is given. The bone was replaced and the wound sewed up. The child continued two weeks under observation, during which time it learnt to sit up properly and to walk alone, also to feed itself, whereas before operation it had always been fed artificially. Further, it took more interest in its surroundings. The fits remained entirely in abeyance during this time. The operation was performed about March, '91; this paper ap-

peared in June of this year. The author states that lately he has heard from the child's mother, who states that it runs about and continues to progress mentally, also that there has been no recurrence of the fits. E. G.

MINOR PSYCHICAL DISTURBANCES IN WOMEN.—Dr. Campbell said (Report of 60th annual meeting of British Medical Association, *British Medical Journal*,) that women under all circumstances affecting the general health were liable to physical disturbance. Cases displaying such symptoms are very frequent at the London hospitals, and are interesting as marking the borderland between sanity and insanity. Dr. Campbell's observations were based on a study of some two hundred cases, none of which went on to insanity. Cases manifesting the insane diathesis, and, as far as possible, cases of hysteria were excluded. Among the most common symptoms noted were depression of spirits and irritability, both sensorial and emotional. Fears were readily excited in many cases, and vague, ill-defined fears frequently present. A feeling of impending insanity, loss of memory and power of attention, and unpleasant dreams were common symptoms. Hallucinations were rare, but a few of sight were noted. In regard to the causes of these symptoms, it is still to be determined how far they are due to imperfect nervous organization, and how far to the effect of vitiated plasma on the nervous system. R. G. C.

PATHOLOGY AND TREATMENT OF MYXOEDEMA.—Dr. G. R. Murray (*ibid.*) reported four cases of myxoedema treated by the injection of an extract of thyroid juice, all of which showed marked improvement in both mental and physical symptoms. The extract is prepared from the fresh glands of sheep, and is sterilized by the use of carbolic acid. Twenty-five minims are injected once a week or a smaller quantity is used more frequently. In from three to six months the swelling of the face and hands disappeared, the skin became moist, the temperature rose to normal, and the scalp became covered with hair. The expression of the face became animated and the patients became much more active. Two of these cases died from heart failure apparently due to exertion. Both of these were over 60, and both showed signs of cardiac degeneration before treatment began. The injections should be made slowly, five minutes being taken to inject 25 minims, as rapid injection was followed by flushing and once by unconsciousness.

Dr. Claye Shaw reported a case of myxoedema with restless melancholia which had recovered under treatment by injections of thyroid juice. Extracts of the glands of sheep, calves and cows were used, and the injections were made every second or third day for two months, when the patient was paroled for a month and discharged recovered.

Dr. Mitchell Clarke mentioned one or two cases in which the results of this treatment were not successful, as no change resulted. He thought that transplantation was more likely to be successful, as the results would be more permanent.

Dr. Hearn reported three cases in which marked improvement had followed

injection of thyroid juice. Professor Horsley said he considered injection better than grafting, though it did not effect permanent cure, because grafting was an extremely difficult operation. R. G. C.

THE VALUE OF HYPNOTISM IN CHRONIC ALCOHOLISM.—Dr. C. Lloyd Tuckey (*ibid.*) stated that up to January, 1892, he had treated thirty-two cases of chronic alcoholism by hypnotic suggestion, of whom twenty-one were males and eleven females. Of these he considered five as cured, as they had had no relapse in one or two years. Six had had no relapse, but had not been under treatment long enough to be pronounced cured. Two had relapsed, but were still under treatment and considered curable. Five cases were benefited, as they drank less frequently. Nine had relapsed after a few months of treatment. Four were unaffected by treatment, and in one case the result was not known. R. G. C.

MANIA CAUSED SULPHURETTED HYDROGEN.—J. Wiglesworth, M. D. (*British Medical Journal.*) reports two cases of mania caused by the inhalation of sulphuretted hydrogen, both of which were marked by a great amount of muscular excitement and a tendency to roll the head on the floor or pillow. These cases, as well as those of mania following the inhalation of other poisonous gases, are considered as due to the paralysis of the highest cortical areas only, causing mania by the resulting lack of inhibition. R. G. C.

OPERATIVE TREATMENT OF GENERAL PARALYSIS.—John MacPherson, M.B., F.R.C.P., and David Wallace record (*Ibid.*) the results of operation in five cases of general paralysis. They considered the disease as primarily a specific inflammation and looked for benefit if the operation could be done early enough. The opening in the skull was made in all cases over the oro-lingual center. (Inferior part of ascending frontal and posterior part of left inferior frontal convolution). In two cases both sides were opened and in the other three, only one. From a surgical standpoint all cases were successful and healed by first intention. In four of the cases there was marked improvement in the mental symptoms, lasting from one to three weeks, but no permanent benefit resulted. They conclude that to make the operation of material benefit it should be performed at an earlier stage of the disease than in their cases, as in all of them the pathological appearances were such as to lead to the inference that the disease was fully established.

R. G. C.

CASE OF HYSTERICAL ANURIA.—Dr. Holst, of Riga, reports the case of a school-girl, 16½ years old, who had, in connection with an attack of chlorosis, first oliguria, and finally complete suppression of urine, lasting 17 days. He believes himself able to exclude deception, from the character of the patient and the watchfulness of her mother. The secretion returned, finally, in

obedience to hypnotic suggestion, but continued very scanty. Finally, slight application of the actual cautery to two points on the back determined an abundant flow of urine. The final success he considers an illustration of the advantages to be obtained by suggestion in other ways than by hypnotism.—*Centralblatt f. Nevenheilk., Feb., 1892.* W. L. W.

MARCHI'S METHOD OF COLORING PATHOLOGICAL PREPARATIONS OF THE NERVOUS SYSTEM.—The method consists in first hardening small portions of the tissue to be examined 3 to 4 mm. thick in 2% solution of bichromate of potash for a week or more, then immersing them for 5 to 8 days in a mixture of 2 parts 3% bichromate solution and part 1% solution of osmic acid. The specimens are then hardened in alcohol, imbedded in celloidin, and cut by the usual methods. The normal nervous tissues have a uniform brown color, but degenerated portions, fat-granule cells, and the fatty pigment are colored black. Dr. Redlich, working in Obersteiner's laboratory, finds that degenerated nerve fibres can be better traced by this method than any other with which he is acquainted. It is better adapted to fresh cases than those in which the products of degeneration have been absorbed and replaced by sclerotic tissue. Sections can be stained with carmine and fuchsine.—*Ibid.*, March, 1892. W. L. W.

HYALINE CASTS IN THE URINE OF THE INSANE.—Vassale and Chiozzi [Riv. sperim. di frenatria, 1891, No. 3,] found hyaline casts in the urine of nearly all of 86 recently admitted insane patients, irrespectively of the form of insanity; albumen was found in only a few cases. As a rule, the casts dimiminished in number as the patients improved; this was especially noticeable in some cases of periodical insanity. In some cases in which albumen was found, the lesion was shown, post mortem, to be of degenerative, not inflammatory nature.—*Ibid.* W. L. W.

ALTERATIONS OF THE PIA MATER IN THE INSANE.—Del Greco (*Ibid.*) investigating the condition of the pia matter in 48 cases of insanity, found in all cases of general paresis periarteritis of the smallest vessels, with endarteritis obliterans, and thickening and fatty degeneration of the muscular coat of the vessels of medium size. The uniformity of the periarteritis, even in the earliest stages of the disease, spoke in the author's opinion for its vascular origin. In pellagrous insanity and acute delirium evidences of acute hyperæmia were found; in other forms of insanity the changes were mostly wanting or unimportant.—*Ibid.* W. L. W.

CHANGES IN THE PERIPHERAL NERVES IN GENERAL PARESIS.—Colella (*Annali di Nevrologia, 1891,*) found the lesions of parenchymatous neuritis of peripheral origin in seven cases of general paresis which he examined. The trophic centres connected with the nerves affected and the nerve-roots showed no

marked changes, and the intensity of the disease increased with the distance from the origin of the nerves.—*Ibid.* W. L. W.

SYMPTOMATOLOGY OF TABES.—Prof. Rosenbach, of Breslau, calls attention to two points which he thinks useful in the diagnosis of locomotor ataxia in its earlier stages. One is an increase in the abdominal reflex, which is often very greatly exaggerated in this disease. This reaction seems to stand in an inverse relation to the knee-jerk; it is much more active in children than in adults, and its disappearance is very frequently associated with the exaggerated knee-jerk characteristic of hemiplegia.

The other symptom is an inability of the patients to stand on tiptoe with the eyes closed. This is often observed in patients who present the greatest diagnostic difficulty, and who are entirely able to perform the same movement with open eyes—a point which should always be ascertained. Many healthy persons have difficulty in balancing themselves on the toes at the first trial, but this can be overcome by a little practice, and they will then be able to do it with closed eyes, which is impossible to ataxics, even in the earliest stages. —*Ibid.*, April, 1892. W. L. W.

RECOVERY FROM GENERAL PARESIS.—Case reported by Kusnezow, (*Wrathsch, 1891, No. 10.*) An engineer, aged 43, had shown, for a year before his admission, changes in his character and slight inaccuracy in his work. Later he became sleepless, excited, and loquacious, damaged his property, and undertook extravagant projects. Admitted to the asylum in 1881. Here he presented inequalty of the pupils, tremor of the hands, exaggeration of knee-jerk, disorders of locomotion and speech, defects of consciousness and of memory, and extravagant delusions. After some weeks the excitement increased to delirious agitation. In April, the excitement subsided after a phlegmonous inflammation of the leg; he became correct in conduct, but the extravagant delusions persisted. By the end of July, at which time the patient was discharged, the delusions had entirely disappeared, and the patient was entirely quiet and collected. Some months later he resumed his employment, rendered satisfactory service, seemed to his wife the same as before, and had remained healthy. The author is of the opinion that a timely diagnosis, early removal from the surroundings, and appropriate therapeutics favor the cure of the disease, and that on this account the psychiatric education of all physicians is necessary.—*Ibid.* W. L. W.

LOCALIZING SYMPTOMS AFTER SUCCESSFUL OPERATION FOR CEREBRAL ABSCESS. —At a meeting of the Berlin Medical Society, Nov. 28, 1891, Baginsky and Glück reported a successful case of operation for cerebral abscess of the temporal lobe, consecutive to middle ear suppuration. The feature of special neurological interest was that, although localizing symptoms had been absent before the operation, the patient, during the first few days following it would repeat words that were spoken in his presence, sometimes from twenty

to forty times. The symptom disappeared at once and finally with the removal of the tampon with which the abscess-cavity was filled. No general symptoms were produced by the tampon, and the phenomenon could only be attributed to its local effect.—*Ibid.*, May, 1892. W. L. W.

THE RELATION OF PELVIC DISEASE TO INSANITY.—Dr. George H. Rohé of Catonsville, Md., read a paper at the fifth annual meeting of the American Association of Obstetricians and Gynecologists, at St. Louis, Mo., September 20-23, 1892, upon "The Relations of Pelvic Disease to Psychical Disturbances in Women."

The author pointed out the frequency with which bodily conditions influenced mental states. Thus a torpid condition of the intestines, Bright's disease, putrefactive processes in the intestinal canal, etc., might give rise to melancholia and other disorders of the mental functions. It is not irrational to suppose likewise that diseases of the female sexual apparatus would have a not inconsiderable influence in the production or perpetuation of mental disorders. As a contribution to the knowledge of the subject the following report was submitted:

In a hospital containing 200 insane women, 35 were subjected to vaginal examination and 26 found with evidences of pelvic diseases. In 18 of these the uterine appendages were removed with the following results:

Sixteen recovered from the operation and two died. Of the 16 recovered, three have been discharged from the hospital completely restored, both physically and mentally. In 10, considerable improvement followed the operation in both physical and mental conditions, and in 3 the operation was of too recent a date to allow any definite expression of opinion.

The mental disorder present in the 18 cases was melancholia in 6 cases, simple mania in 1, puerperal mania in 4, hysterical mania in 1, periodic mania in 2, hystero-epilepsy with mania in 1, and epilepsy with mania in 3.

The author basing his opinion upon his experience, concludes as follows:

"The facts recorded demonstrate, first, that there is a fruitful field for gynecological work among insane women; second, that this work is as practicable and can be pursued with as much success in an insane hospital as elsewhere; and third, that the results obtained not only encourage us to continue in the work, but require us, in the name of science and humanity to give to an insane woman the same chance of relief from disease of the ovaries and uterus that a sane woman has."

VACUOLATION OF CORTICAL NERVE-CELL NUCLEI IN CEREBRAL CONCUSSION.—Mr. John Macpherson in *The Lancet, May 21, 1892*, reports two cases of cerebral concussion in which distinct vacuolative refractile particles were found in the centre of the nuclei of cells of the third and fourth layer of the motor and frontal regions. He draws the following conclusion from the histories and autopsies of these two patients: (1.) That a nuclear nerve cell lesion in the cortex is a condition of great importance, and indicates an interference with the vitality and function of the cell; (2) that it is capable of being pro-

duced by vascular changes which affect the nutrition of the cell; (3) that when the lesion is situated chiefly in the motor cortex it tends to interfere with the vital functions by the implication of thermotaxic cells; (4) that important vaso-motor changes occur after concussion which are the result either of exhaustion of the subcortical vaso-motor centres from over-pressure or of their inhibition by hyperaction of the cortical cells implicated. J. M. M.

PARALDEHYDE: HYPNOTIC AND DIURETIC.—J. Cockburn Syson, in *The Lancet, July 23, 1892*, reports the use of paraldehyde in a case of senile arterial degeneration with mental depression, restlessness, insomnia, and where these existed a double aortic murmur, with mitral regurgitation and dilatation of the left ventricle. At first forty minims in peppermint water were given and this was followed by comparative restfulness without sleep. Two hours later thirty minims were administered and within half an hour the patient dropped quietly to sleep, which lasted about four hours. Two nights later the same doses were given, but these failing to produce the desired effect a third dose of fifty minims was allowed three hours after the second. After this third dose, though the patient slept, there was considerable muscular twitching and shifting about in bed. At short intervals he would sit up (his eyes being closed the while) and make incoherent remarks, but when told to go to sleep would lie down again and remain quiet during p riods of ten or fifteen minutes. This lasted for three hours, after which there was more or less drowsiness, but no sleep. The pulse was not in any way weakened, but during the ensuing twenty-four hours there was marked muscular weakness and polyuria. Several weeks later the drug was administered to the same patient during the appearance of dropsy due to failing cardiac compensation. Ninety minims were given at 10 P. M. Sleep followed within twenty minutes. At midnight a dose of one drachm was administered, followed by several hours of quiet and drowsiness, with snatches of sleep. During the following day weakness and unsteadiness of gait were marked, but the most striking result was the complete disappearance of the dropsy, which had persisted for a week, and accompanying polyuria. Further trial warrants the following conclusions: Paraldehyde may be looked to as a fairly reliable and safe hypnotic; its administration is followed by a well marked stage of excitement; it does not depress the heart's action; does not interfere with appetite or digestion, and posesses probably diuretic properties and induces a sleep which is described as "refreshing." J. M. M.

PROLONGED FEEDING BY STOMACH-TUBE.—In the report for 1891 of the Glasgow Royal Asylum, Dr. Yellowlees records the following case: "A lady aged forty-four was admitted in January 1876, laboring under melancholia, with delusions of dread and suspicion, especially that her food was poisoned. In September of the same year her refusal of food became so obstinate and her resistance so determined that it was necessary to resort to the stomach-tube. Every attempt to feed her otherwise failed. She could not be made to swallow even a teaspoonful of water, but allowed it to pass into the air-pass-

ages rather than yield; and she was fed with the tube three times daily till May, 1885, a period of eight years and eight months. During all this time she was very miserable, and kept continually repeating the doleful refrain. 'you're going to kill me; you're going to kill me. I know you're going to kill me.' The spell was broken almost by accident. Entering the ward when she was just about to be fed, I made another attempt with the spoon. In the struggle her chair was tilted backwards; in terror of falling she forgot for a moment to resist, and suddenly swallowed the spoonful of beef-tea I had put in her mouth. She seemed surprised and shocked, but the advantage once gained was followed up. By very slow degrees she was made to swallow all the beef-tea which had been prepared for the tube, and was then told that, having taken it once, she must take it always. Many a tedious struggle it cost the nurses, but at length they triumphantly reported that she had used the spoon with her own hand. From this point recovery, though slow and gradual, was uninterrupted. She refused to leave the infirmary ward and the nurses to whom she owed so much, became useful, cheerful, intelligent, and full of interest in others, and was discharged recovered in February, 1891, after a residence of over fifteen years. She is still quite well, and the recovery seems not only complete, but permanent." J. M. M.

Operation for Traumatic Epilepsy.—In the last number of the *Archives de Neurologie*, Drs. Manoury and Camuset record at length a case in which trephining was performed for epilepsy, which was subsequent to an injury and a resulting depressed fracture. The case is important on account of the notable failure of the operation to modify the condition in the slightest degree. It must be confessed that from the first it was almost a helpless case, but it may be useful to describe it as indicating the kind of case in which operation is not likely to be followed by any good result; and as Drs. Manoury and Camuset themslves remark, their observations go to confirm the facts, generally admitted at the present time, that the long duration of attacks and the appearance of dementia should serve as contra-indications of operation. The patient was a young man of twenty-three, with no evidence of neuropathic inheritance, except that a paternal grand-uncle had suffered from fits. Except for a convulsion at eight months he was healthy up to the age of fourteen, when he met with a serious accident—a kick from a horse—which fractured his skull anteriorly and laterally. The wound healed rapidly, but three months later he had the first epileptic attack. The attacks recurred and with increasing frequency as he became older. At the age of twenty he suffered from at least one a week, and he was also undergoing a physical change which had resulted, at the time of his admission at the age of twenty-three, in a condition of dementia. The attacks which were observed were general, without any aura or motor symptoms indicating local damage to the brain on one or the other side. There was a well marked cicatrix ten centimeters long over the upper part of the right frontal and parietal bones. At the operation it was found that the bony surface was rough and presented irregular depressions. Similar depressions and prominences were also visible on the inner surface, but there were no adhesions between the dura mater and the bone.

The dura mater apparently was not opened, and consequently the condition of the cortex was not examined. Briefly, the result of the operation was at first to increase the number of fits, but soon the former level was reached. Thus in the first month after the operation there were thirty-six fits, while in the second there were only seventeen, and in the third the same number—a condition which did not materially differ from that which was present before operation. There was no change in the psychical condition, so that the operation may be said to have been absolutely without any beneficial effect on the patient. When the severe character of the original injury is considered, and the length of time which elapsed before the operation was undertaken, it is not to be wondered at that the cortex had become so changed that a simple trephining had no appreciable effect on the condition.—*The Lancet*, August 27, 1892. J. M. M.

PSYCHOSES AFTER INFLUENZA.—At the meeting of the Section in Psychology of the British Medical Association, held at Nottingham, July 27th, Dr. Althaus opened a discussion on Psychoses after Influenza. He said that no true post-grippal psychoses had been described previously to 1890, for, with the exception of a case mentioned by Sir Crichton Browne, all other cases previously described have been those of initial delirium. He proceeded to consider these affections in connection with other and better known post-febrile insanities, and exhibited a table showing the principal points in those psychoses which are apt to come on after rheumatic fever, pneumonia, ague, the acute exanthemata, erysipelas, cholera and influenza—viz., the number of well-observed cases of these several affections, the influence of sex, age and general and special predisposition, their duration and the eventual result. He submitted the following points: 1. Relative frequency: he had found that they were not only absolutely but also relatively to the number of cases of the parent affection more frequent than the latter, and that the only acute disease which could at all compare with influenza in this respect was typhoid fever. 2. Sex and age: it was shown that the male sex was more liable than the female, and that most cases occurred between twenty-one and fifty years of age. 3. Predisposition: this was found to have been present in 72 per cent of the cases, but Dr. Althaus drew attention to the tendency prevailing in medical writings to exaggerate that influence from sheer force of habit. Alcoholism was present in eleven per cent. 4. Relative importance of the fever and the special toxine of influenza. He considered the toxine the more important agent of the two, more especially in the production of melancholia and general paralysis, the fever being neither sufficiently severe nor protracted to explain the symptoms observed. The fever was, however, of influence in the post-grippal delirium of collapse. 5. Duration: 12 per cent recovered in a week, 32 within a month, and 56 lasted beyond a month. 6. Proportion of cured, uncured and fatal cases: 7.6 per cent died, 56.6 recovered, and 35.8 remained uncured. 7. Relationship between the severity of the feverish attack and the subsequent appearance of psychoses: the latter were most apt to appear after comparatively slight attacks, viz., 55.2, then followed severe attacks with 27.6, and last came those of medium severity with 17.2. 8. The length of time that may elapse between the feverish attack and the outbreak

of the psychosis varied according to the form of the psychosis, the delirium of inanition following close upon a crisis, while melancholia supervened between a few days and weeks after, and general paralysis of the insane later still—viz., up to six months after the attack. 9. Is there any special form of psychoses—a true grippal insanity—caused by influenza which does not occur after other fevers? Four different groups of psychoses were described, none of which were absolutely peculiar to grip, but they differed from other post-febrile insanities by presenting a much greater variety in their clinical features, those most nearly allied to them being the post-typhoid psychoses. 10. How does influenza affect those previously insane? Variously: epidemics in asylums were referred to showing that insanity constituted in no way a protection against grip, and that in many lunatics the attack of influenza left their mental condition unchanged, while in others the latter was either improved or aggravated. Dr. Althaus thought that such various results might be owing to different vascular conditions. 11. The treatment was successively considered of melancholia, the delirium of inanition, special forms of insanity grafted on pre-existing neuroses or psychoses, and of general paralysis of the insane.—*The Lancet*, July 30, 1892. J. M. M.

Intestinal Disinfection in Some Forms of Insanity.—At the meeting of the following day, Dr. MacPherson read a paper upon the above subject. After preliminary remarks as to the harm that is often done by narcotics in acute cases of insanity, he stated that he had found brisk purges often of great value, especially in warding off recurrent attacks. The visceral symptoms in melancholia had suggested to him the means for their removal. He began upon a suitable case by washing out the stomach, the administration of calomel at night, followed by a laxative in the morning, and then regular doses of some antiseptic. He had tried naphthalin and B-naphthal, and found the former the better. Nitrogenous diet was restricted and peptonised gruel administered. Prolonged treatment had been found essential to success. Four cases were quoted in detail, in all of which decided improvement followed the treatment described. Thirty other cases were also summarized. In no case was the general health interfered with; in most cases the body weight increased steadily—in no case did it fall. Sleep was very markedly improved, and this improvement was maintained without increasing doses of the drug, and was never followed by increased restlessness; in no case was there any change in the nature of the mental symptoms, and it did not shorten the period of illness, but it modified the illness materially, lessened the motor irritability and the tendency to suicide, and generally ameliorated the symptoms. He considered the drug safe, for though it failed in some cases it, as a rule, promoted nutrition and induced a normal sleep, while the psychical disorder was not affected.—*The Lancet*, August 6, 1892.

J. M. M.

Paranoia.—At the third day's meeting the discussion of paranoia was introduced by Dr. E. L. Dunn, who read a paper in which he gave an abstract

of the French and German opinions and descriptions of this disease, and described in detail the variety paranoia persecutoria, giving the three stages of the disorder. He summarized the differential diagnosis between it and melancholia, by saying that in the latter the patient thinks he suffers justly on account of his wickedness, while in the former, the patient thinks he is a victim and suffers from no fault of his own.—*The Lancet*, August 13, 1892.

J. M. M.

INSANITY AS A PLEA FOR DIVORCE.—At the same session Dr. Weatherly read a paper upon this subject, in which he expressed opinions opposite to those he had held ten years before. He denounced withholding from anyone about to marry, the fact that the other had been insane or came from a stock insane, or otherwise unsound. With regard to the question whether insanity occurring after marriage should ever be a plea for divorce, he summed up the leading objections under four heads: (1.) That in nearly all cases the prognosis presents some doubtful features; (2.) that the marriage service, where it says "in sickness or in health," represents the sanctity of the marriage contract; (3.) that it might be argued that if in one disease divorce is justifiable, why not in others, such as cancer or phthisis? (4.) that it placed undue responsibility upon medical men.—*The Lancet*, August 13, 1892. J. M. M.

BOOK REVIEWS.

A Dictionary of Psychological Medicine. Giving the Definition, Etymology and Synonyms of the Terms used in Medical Psychology, with the Symptoms, Treatment, and Pathology of Insanity, and the Law of Lunacy in Great Britain and Ireland. Edited by D. HACK TUKE, M. D., LL.D., Examiner in Medical Psychology in the University of London; Lecturer on Psychological Medicine at the Charing Cross Hospital Medical School; Co-Editor of the "Journal of Mental Science." Philadelphia: P. Blakiston, Son & Co., 1892. [2 vols., 8 vo. Pp. xv, 1477.]

In his preface, the editor says: "The study of Psychological Medicine has been so greatly extended in recent years at home and abroad, that a literature has sprung up of alarming dimensions, containing a record of a vast number of clinical observations, ingenious theories, and as a necessary consequence, the coinage of a multitude of terms. It is open to question whether the relative amounts of the tares and the wheat are in exactly the proportions we should desire, but it is not open to question whether the Medical Psychologist stands in need of a work of reference to which he can refer for information. That any such work can be complete is too much to expect. In the present instance there must necessarily be some omissions. The Editor is only too conscious of its imperfections, but ventures to believe that, in spite of these defects, this Dictionary will prove a great assistance to those engaged in the study or practice of Mental Medicine."

We believe that the want alluded to above, if not "long felt," is a real one, and that the manner in which the work has been carried out justifies the undertaking. The long list of contributors, eminent in psychiatry, neurology and psychology, selected from the continent of Europe and this country, as well as Great Britian, is itself a guaranty of the quality of much of the work. Perhaps the quality of the book would be better indicated to the average reader by calling it an encyclopaedia than a dictionary. Many of the topics are treated with considerable fullness; thus, the article on 'Developmental Insanities," by Dr. Clouston, occupies 14, and that on "General Paralysis" by Dr. Mickle, 25 closely printed pages. We believe that the student might obtain a better knowledge of insanity from this work than from most of the text-books, besides a great deal of interesting and valuable information nowhere else accessible except in the files of special journals. Hysteria and hypnotism are treated by Charcot, in conjunction with La Tourette and Marie. Not only is the lunacy law of Great Britain expounded with great fullness, but brief accounts are given of the legislation on this subject in other countries.

As is, perhaps, necessarily the case, in a work carried out by the collaboration of a multitude of authors, the various articles are by no means all of equal quality. Many views are advocated that are open to question, and in the amount of space allotted to different topics it would often seem as if reference was had rather to expressing the views than enlightening the minds of English readers. "Paranoia," for instance, whether it should be considered a distinct form of insanity or a stage in some of the other groups of cases

seems to us a "symptom-complex" worthy of more extended treatment than it receives, either under that, or, so far as we have discovered, any other head. The whole subject of insane delusions is, we think, more summarily treated than its interest and importance demand.

We believe it would have added to the value of the work without unduly increasing its bulk, if the practice of a few of the writers, of furnishing reference to the literature of their respective subjects, had been more generally followed. The bibliography at the close of the work is confined to works in book form, and in the English language, and is not classified with reference to subjects. These, however, are minor matters, about which there is room for difference of opinion. The book is one which all can consult with interest and profit, and which no serious student of the subject can well afford to be without.

Jahresbericht der niederoesterreichischen Landes-Irrenanstalten Wien, Ybbs, Klosterneuburg und Kierling-Gugging, sowie der sonstigen Anstalten zur Unterbringung geistgestoerter niederoesterreichischen Landespfleglinge pro 1898. Ausgegeben von niederoesterreichischen Landesausscusse. Wien. Aus der kaiserlich-koeniglichen Hof-und Staatsdruckerei, 1891. [Annual Report of the Asylums for the Insane of Lower Austria, for 1890.]

This report presents the same features as have been commented on in previous years. The total number of patients treated in the various asylums of Lower Austria during the year was 3089, 892 were discharged—263 as recovered—and 304, or almost precisely 10 per cent of the entire number, died. The mortality does not seem to have been very much affected by infectious diseases, although influenza prevailed somewhat. There is still complaint of overcrowding, and the large percentage of cases due to drunkenness is a striking feature of this, as of preceding reports. In the Vienna asylum, alcoholic excesses are assigned as the sole cause in 26.6 per cent, and a contributing cause in 8.7 per cent of the male admissions for the year, and 121 of the 175 males discharged as recovered were alcoholic cases.

Die Hirnlaehmungen der Kinder. Von B. SACHS. Volkmanns Sammlung Klinischer Vortraege, Nr. 46, 47. Leipzig: Breitkopf und Haertel, 1892. [The Cerebral Palsies of Children. By B. Sachs.]

The views of this affection advocated in the pamphlet under review do not differ essentially from those announced in the same author's article in the New York Medical Journal, recently noticed by us, although more fully elaborated.

As regards origin, the cases are divided into those originating before, during, and after birth. In those originating before birth, traumatic influences, as blows upon the abdomen of the mother, play an important part. Those originating during birth are due to pressure, either from the bones of the pelvis, in difficult labor, or from instruments. The author's experience leads him to think that injury to the fœtal brain is more likely to result from unduly prolonged labor than from the judicious use of the forceps. In

those cases in which paralysis occurs after birth, the infectious diseases play a very important part in the etiology. Measles, scarlet fever, typhoid fever, smallpox, tonsilitis, pneumonia and cerebro-spinal meningitis may all give rise to cerebral lesions. The author cann t accept either the view of Marie and Gibotteau, that all cases of this kind result from infectious disease, nor that of Struempell, according to which the cerebral paralysis of children is itself a specific infectious disease, analogous to infantile spinal palsy. He considers fright to be an important etiological factor, but far less so than injuries to the head. Convulsions may sometimes give rise to hæmorrhage, with paralysis.

As to the form of paralysis, he found hemiplegia 156 times, diplegia 39 times, and paraplegia 30 times, among 225 cases. The frequency of bilateral paralysis renders it inappropriate to confine the designation of infantile cerebral palsy to hemiplegic cases.

The greater part of the post-natal cases develop within the first three years of life, but the author would class cases occurring up to the fifteenth year with infantile cases.

The most important symptoms, apart from the paralysis, are aphasia, observed by the author twenty times; hemianopsia, observed eight times; contractures, occurring in 75 per cent of cases; exaggeration of reflexes; atrophy, both of bones and soft parts of the paralyzed extremities; post-paralytic movements, of which associated movements, athetoid movements, and choreiform movements are the most frequent, and epilepsy, which occurs in about 45 per cent of cases. In eight instances, patients were brought to the author to be treated for epilepsy, in whom it had not been suspected that the epilepsy was an accompaniment of cerebral palsy. Enfeeblement of intelligence may be absent, but usually exists, ranging in degree from slight imbecility to the most complete idiocy.

Atrophy, sclerosis, cysts, porencephalus and hæmorrhage are the most frequent lesions found in the brains of the subjects of this condition. The author's studies have led him to conclude that hæmorrhage, embolism and thrombosis contribute as large a share to the paralyses of children as of adults, and that the various lesions above mentioned result, in the majority of cases, from vascular disease.

As to therapeutics, an apoplectic attack in a child is to be treated on the same principle as in an adult. Contractures are often amenable, to a great extent, to orthopædic measures, and athetoid movements may, in some cases, be permanently checked by wearing an appropriate apparatus. Operation seems to be the only therapeutic resource against the accompanying epilepsy, and the results thus far, have not been calculated to inspire enthusiasm, although the author has observed decided improvement after simple trephining, and cases of recovery after extirpation of the supposed centre of discharge have been reported. The danger of paralysis after extirpation of parts of the "motor region" is a drawback to such operations. The author, however, is inclined to think that there is a legitimate field for operative surgery, more especially in the prophylaxis of epilepsy, by extirpating sclerotic portions of the brain in the hope of preventing the development of the neurosis. Cases that are not amenable to surgical treatment are

to be treated in the usual way, with bromides, alone or in combination with chloral. Too much must not be expected of drugs in cases dependent on organic lesions.

Darwin and after Darwin, an Exposition of the Darwinian Theory, and a Discussion of Post-Darwinian Questions. By GEORGE JOHN ROMANES, M.A., LL.D., F.R.S. Vol. I, the Darwinian Theory. The Open Court Publishing Company, Chicago, 1892.

The publication of a work, by Prof. G. P. Romanes, entitled Darwinism and after Darwin, is doubly interesting. It recalls to the recollection the stirring controversies which arose out of the enunciation of Darwin's views on the theory of evolution, and raises the highest anticipation as to the treatment "Post-Darwinian Questions" will receive from so competent a writer as Mr. Romanes.

How different an aspect the theory of evolution presents to the world at large to-day compared with the condition of things which existed a little more than thirty years ago! Although the theory had been consciously or unconsciously simmering in the minds of other naturalists besides Darwin for years previous to the publication of the Origin of Species, the result of Darwin's careful and persistent labor, it only came prominently before the general public at the meeting of the British Association, held at Oxford in 1860.

If at that time many of the older naturalists and biologists were not only not prepared to accept Darwin's conclusions, but, on the contrary, were ready to combat them, no one need wonder that the champions of the orthodox theology of that day should have called their comrades to arms by beating what Prof. Huxley delighted to call the "drum ecclesiastic."

When scientists of the eminence of Tyndall, unfettered by formal adhesion to any specific scientific creed, at first hesitated to accept the conclusions of Darwin, the signatories to "thirty-nine articles" and the exponents of Shorter Catechisms and Westminister Confessions may well be excused for having sounded the alarm.

But what a contrast is presented to-day. Prof. Huxley, the most redoubtable champion of the new school and defender of the evolutionary faith, finds his occupation gone. The eminent divines and theologians once ready and anxious to cross swords with him have given place to lisping curates and newly fledged ministers almost prepared to prove in copious—if not always intelligible—language that orthodoxy and evolution are synonymous. Nor does the contrast end there. There is still as Sam Slick remarked, "a deal of natur in human natur." Thirty years ago such men as Darwin, Spencer, Huxley, Asa Gray and Hooker, not only represented the advanced school in Natural Science, but were likewise regarded by the average layman as distinctly heterodox and only to be labelled dangerous. To-day finds Prof. Romanes complaining that "while not a few naturalists have erred on the side of insufficiently distinguishing between fully verified principles of evolution and mere speculative deductions therefrom, a still larger number have formed for themselves a Darwinian creed, and regard any further theorizing on the subject of evolution as *ipso facto* unorthodox.

In other words "human nature" has asserted itself once again and Darwinism has been added to the long list of isms.

Such being the case it is well that Prof. Romanes has undertaken, in the present volume, for the benefit of general readers, the systematic exposition of "Darwinism and Darwin," and thus prepared the ground for the discussion of the questions touching heredity, isolation, utility, &c., which have been raised since the death of Darwin, and which Prof. Romanes will deal with in the second volume of his present work.

Those already familiar, at first hand, with Darwin's work will readily concede the Professor's claim to be a close student of the literature of Darwin. Not only is Prof. Romanes a close student, but he is also a fair and candid exponent of Darwin's views. His present work is, therefore, one of great value for the class for whom it is intended. The forthcoming volume, which will deal with "Post-Darwinian Questions" will be hailed with interest by naturalists, not only because of the ability of its author to deal critically with such questions, but because of his reputation as an original experimenter and observer.

Doubtless, in this volume, more will be learned of the experiments in crossbreeding which resulted in the rats and rabbits exhibited by Prof. Romanes at the Conversazione of the Royal Society, in June last. J. G. B.

Some Recent Public "Rain" Baths in New York City. By WM. PAUL GERHARD, C. E. Reprinted from *The Engineering Record*, pp. 25.

Mr. Gerhard gives an interesting summary of the important part baths played in the lives of the ancients. Every village in Russia to-day has its vapor bath (a statement which from the appearance of the Russian immigrant will be received with surprise) and cheap public baths are common in Europe.

The development of this system has tended to the abolition of the old-fashioned tub and the adoption of shower baths, or as they are called "rain" baths. The choice of this name is unfortunate, as they are not "*rain*" but simply shower baths, and because there are real rain baths this misnomer might lead to confusion.

The following advantages are claimed for these baths:

First. A large economy in the provision and maintenance of tubs.

Second. Economy of labor in caring for and refilling the tub.

Third. Quickness and great efficiency.

Fourth. Economy in space.

Fifth. Economy in water.

Sixth. Freedom from danger of communicating disease and the prevention of the contact of soiled water with the body.

Seventh. The stimulating and refreshing effects of the descending stream.

To these advantages should be added, in the case of hospitals for the insane, the prevention of the possibility of suicide by drowning, and of the danger arising from the use of water too hot or too cold.

The pamphlet contains twelve illustrations showing the arrangement of the compartments and the means of securing water at a uniform temperature.

This method of bathing offers a good substitute, in the case of intelligent patients, for the present tub system in hospitals. For demented and filthy patients, however, the present method in vogue in some of the State hospitals,

of having a douche attached to a long, moveable, rubber tube, thus enabling a nurse to handle it, seems preferable. A. M.

Criminal Responsibility in Insanity, with Special Reference to Epilepsy. By T. DUNCAN GREENLESS, M. B. Edin., J. P., Medical Superintendent, Grahamstown Asylum, Cape Colony. Reprinted from "The Cape Law Journal," Feb., 1892, pp. 14.

The need of a scientific exposition of the relationship of insanity to crime is shown by the fact that insanity is so rarely adduced in the colonial courts as a plea of defence that when it is submitted, it is recognized practically as an admission of guilt. No barrister therefore would willingly bring forward such a defence unless he wished to lose his case.

He divides his subjects into the following sections:

(1.) The influence of insanity upon the mental and moral faculties.
(2.) The relationship of insanity to crime.
(3.) Legal enactments bearing upon crime.
(4.) The influence of epilepsy upon the mental and moral faculties.
(5.) General conclusions and summary.

Under the legal enactments bearing upon insanity, he considers briefly the English, the American and the Colonial laws.

The American laws, because they are not controlled by the precedents of past ages, when insanity was regarded as a deviltry rather than a disease, take a much more broad and liberal view of the subject of criminal responsibility in its relationship to insanity than the English laws.

He quotes *in extenso* Wise's article "Legal Responsibility of Epileptics" which appeared in this JOURNAL, January, 1888, and the case of Daley, which was published in October, 1888.

The Colonial laws referring to this subject are most unsatisfactory, and seem to be a curious hodge-podge of Roman laws as laid down by Justinian, Dutch and English enactments of a later date but of an equally ancient character. The author fears that many insane persons have been punished unjustly if not illegally because this whole subject is in such a misty condition.

The opinion of the author and his implied suggestion in regard to the care of epileptics will probably be accepted by very few alienists. He claims that insanity always accompanies epilepsy, and that for the protection of society all epileptics should be placed under custodial care. Frightful crimes will probably always be committed by epileptics, whose epilepsy has been masked or is of so mild a character as to allow them to live normal lives. It would seem, therefore, as if this was a lesser evil than to shut up in institutions or colonies thousands of cases who live happy, harmless, useful, and often brilliant lives in their own homes.

He closes his paper by recommending that a clause recognizing the criminal irresponsibility of the insane be added to the penal statutes. A. M.

State Boards of Charities. By WILLIAM P. LETCHWORTH. Reprint of paper read at the Ninetieth National Conference of Charities and Corrections, held at Denver, Col. Geo. H. Ellis, Boston, 1892.

The author briefly describes the creation of boards of charities in eighteen States, with complete descriptions of the scope of their powers and the results

which have followed their establishment. It seems remarkable that in less than thirty years, for the first State Board of Charities was established in Massachusetts in 1863, so much has been accomplished by these noble men and women, who, in spite of many rebuffs, have labored untiringly to improve the condition of the unfortunates, mentally, physically and morally, who are the wards of the State. His advice in regard to viistations is most valuable, and if followed would make such visitations more profitable, and would remove the opprobrium from which they often suffer. He points out that such visitors, though official, are not always wiser than the trustees or those in charge of institutions, and that often they are in a position to receive instruction rather than to superficially or captiously criticise.

It should be borne in mind that few things in this world are perfect, and even in charitable institutions we must look for the maximum of excellence instead of perfection or an ideal in our own mind which has never had a practical illustration. There are often unsatisfactory conditions about an institution which faithful officers and managers are striving to remedy.

The paper closes with a number of suggestions as to what should be the duties and powers of such boards, which reflect the author's deep insight into and thorough appreciation of this subject.

He believes in State care for the insane, but opposes the modern tendency towards enormous mixed asylums, where the medical treatment of the acute insane is apt to be sacrificed to the care of the chronic insane. A. M.

Book on the Physician Himself, and Things that Concern His Reputation and Success. By D. W. CATHELL, M. D. New Tenth Edition (Author's Last Revision.) Thoroughly revised, enlarged, and rewritten. In one handsome Royal Octavo volume. 348 pages. Bound in Extra Cloth. Price, post-paid, $2.00, net. Philadelphia: The F. A. Davis Co., Publishers, 1231 Filbert Street.

The tenth edition indicates the great popularity of this work and its place in the medical literature of this country. It consists of a series of exhortations to uprightness, truth and honorable conduct, so frequently repeated and embellished by so many more or less apt quotations as to convey the impression that many of the medical profession are hopelessly corrupt and that the remainder are in need of such moral soothing syrup to save them from like moral strabismus. A. M.

Recherches Cliniques et Thérapeutiques sur l'Epilepsie, l'Hystérie et l'Idiotie. Compte Rendue du Service des Enfants, Idiots, Epileptiques et arriérés du Bicêtre pendant l'année 1890. Par Bourneville, Médecin de Bicêtre. Avec la collaboration de MM. Camescasse, Isch-Wall, Morax, Raoult, Séglas et P. Sollier. Vol. XI. Avec 16 figures dans le Texte et 10 planches. Paris, 1891 (Clinical and Therapeutic Investigations on Epilepsy, Hysteria and Idiocy.)

The first part of this volume is given to the report for the year 1890 of the department for idiots, epileptics and defective children of the Bicêtre and the Vallée endowment, its annex. A full history of the latter is given, from the conception of the benefaction in the mind of the founder to its acceptance and completion and its first year's operations.

The second part contains six elaborately reported and discussed clinical cases of imbecility or idiocy, in which all the ancestral antecedents, heredity, etc., were carefully sketched out and the history carried down to the final autopsy. It is noteworthy that in the antecedents of two-thirds of these cases there were parental alcoholic excesses. M. Bourneville and his co-adjutors in these reports lay special stress on heredity, and claims that a good heredity of one parent does not favorably modify digeneracy when it is inherited from the other. They also believe that the emotional condition of the mother during the first weeks of pregnancy may give rise to idiocy in the offspring. Another point of special mention is the fact that they apparently find little in these autopsies that indicates much of a future for the operation of craniectomy that has been so much written about of late. The cranium seems to be a comparatively yielding and dilatable receptacle for the enlarging brain and presents no serious obstacle to its development.

This part of the work ends with the reports of three cases of hysteria in the male.

The third section of the volume contains the papers presented by M. Bourneville and his assistants to the International Congress of 1889. It begins with his offered anatomico-pathological classification of idiocy, which it may be of interest to reproduce here. He recognizes the following forms:

1. Idiocy, symptomatic of hydrocephalus (*hydrocephalic idiocy.*)
2. Idiocy, symptomatic of microcephaly (*microcephalic idiocy.*)
3. Idiocy, symptomatic of arrest of development of the convolutions.
4. Idiocy, symptomatic of congenital malformation of the brain (*porencephalus, absence of corpus callosum, etc.*)
5. Idiocy, symptomatic of hypertrophic sclerosis.
6. Idiocy, symptomatic of atrophic sclerosis; (*a*) sclerosis of one or both hemispheres; (*b*) sclerosis of a single lobe of the brain; (*c*) sclerosis of isolated convolutions: (*d*) sclerosis *chagrinée* of the brain.
7. Idiocy, symptomatic of meningitis or chronic meningo-encephalitis, (*meningitic idiocy.*)
8. Idiocy with pachydermic cachexia, or *myxœdematous idiocy*, connected with absence of the thyroid gland.

The papers presented to the Congress were on two of these forms, microcephalic and porencephalic idiocy respectively. Of the latter MM. Bourneville and Sollier recognize two forms, the true and the pseudo-porencephalus. The former of these is due to a defect of development and is consequently congenital, the latter is consecutive to a destructive process, probably due to a circulatory derangement that may originate in intra-uterine life or later. They each have their special anatomical characters, and while in the latter form there may be a somewhat less degree of psychic failure, the true porencephalic idiocy is almost invariably complete.

The work concludes with a memoir by M. Bourneville on myxœdematous idiocy, read before the French Congress of Mental Medicine in 1890, in which he reproduces the cases reported by Manning and Stirling, and adds another of his own observation.

The volume contains a number of photogravures, which, if not beautiful in their subjects, are instructive and illustrate the text. H. M. B.

Manuel Pratique de Médecine Mentale par le Dr. E. Régis, Ancien chef de clinique des maladies mentales à la Faculté de Médicine de Paris, &c. Avec une Préface par M. Benjamin Ball. Ouvrage couronné par la Faculté de Médicine de Paris. Deuxième Edition, entièrement revue et corrigée. (A Practical Manual of Mental Medicine, by Dr. E. Régis, &c., 2d edition, thoroughly revised and corrected.)

Those of the readers of this Journal who are familiar with the earlier issue of the present work, and who have appreciated its merits, will possibly be somewhat surprised to find extensive alterations in this second edition. The changes and additions are numerous and affect nearly every portion: the arrangement has been considerably altered, paragraphs and even whole sections have been added and others omitted that were contained in the former edition, the additions so far exceeding the omissions, however, as to add nearly one hundred and fifty pages to the volume. It is hardly necessary to state that the work is improved, meritorious as it was before; the alterations seem to have been generally judiciously made and the volume includes, as nearly as is possible in a treatise of its compass on so extensive a subject, nearly or quite all the results of researches in this specialty down to a very recent date.

In the historical introduction there is very little change, a notice of the early work of Zacchias being all that has been added to the former edition. In the following chapter on the other hand, extensive alterations have been made, the preliminary remarks on diagnosis are omitted, the section on treatment is very properly transferred to the closing chapters of the book, and those on the etiology and pathological anatomy have been rewritten and much additional matter inserted. The paragraphs on the influence of civilization in the production of insanity are especially enlarged.

The second chapter, on the symptomatic elements of mental alienation, is rewritten and fills sixty-three pages in the present edition, nearly three times the space it occupied in the former one. By far the greater portion of this space is occupied with the description of the physical symptoms, which is, for its compass, more full and satisfactory than any other that we have met with in any recent text-book on insanity. In an appendix to this section, that did not appear in the former edition, the auto-intoxications of insanity are noticed, a subject that might possibly have been more in place in the preceding chapter. The section on the constitutional or organic elements is also rewritten, and though brief, is excellent in matter and in its treatment of the subject.

The chapter on classification is thoroughly rewritten and extended. Dr. Régis, without claiming so to do, has in this edition considerably modified his former classifications. As heretofore he does not include any of the associated, sympathetic or symptomatic insanities among his primary forms, and therefore leaves out of his former classifications altogether such conditions as paresis, epileptic insanity and all the forms of mental disorder associated with spinal toxic influences, bodily disorders, &c. These are considered later under the head of secondary conditions of mental alienation, in which the insanity while associated with or symptomatic of existing organic conditions, nevertheless always falls into one or the other of the primary types. The author's arrangement of these latter in the present volume is as follows:

I.—Functional Alienations (Insanities, Vesanias, Psychoses).

Generalized or Symptomatic Insanities.	1.	*Mania*	Sub-acute (maniacal excitation). Acute (typical mania). Super-acute (acute delusion). Chronic Remittent and intermittent.
	2.	*Melancholia*	Sub acute (melancholic depression). Acute (typical melancholia.) Super-acute (melancholia with stupor). Chronic. Remittent and intermittent.
	2.	*Circular Insanity*	Continuous. Remittent.
Partial or Essential Insanities.		*Systematized progressive insanity*	First Stage (hypochondriacal). Second Stage (persecutory, religious political insanity). Third Stage (ambitious insanity).

II.—Constitutional Alienations, (Degenerations, Dementias, Mental Insanities.)

Degenerations of Evolutions, (Vices of Organization.)	1.	*Disharmonies*	Defective equilibrium, originality, eccentricity.
	2.	*Neurasthenias*	Fixed ideas, impulsions, abulias.
	3.	*Phrenasthenias*	Delusional (multiple delusions of degenerations. Reasoning (reasoning or moral insanity). Instruction (instructive insanity).
	4.	*Monstrosities.*	Imbecility. Idiocy. Cretinism, Myxœdema.
Degenerations of Involution, (Disorganization.)		*Dementias*	Simple dementia.

It will be seen from the above that besides the difference in the order followed, there have been very decided changes in the class of constitutional alienations, and the influence of the Italian school is rather obvious in the modified views of the author. A desideratum of a work of this kind, intended as a text book, is that its classification should be fairly up to the times, and that it should explain sufficiently the terms and systems in actual use. In this volume there is a little left to be desired in this respect, but it meets this requirement more fully and clearly than most works of its kind. There are some points in regard to which Dr. Régis recognizes that there may be differences of opinion; for example, the reference of circular and periodical insanities to the functional alienations, and his division of systematized delusional insanity into stages rather than into varieties, and these are duly indicated in foot notes.

The chapters on special pathology are generally rewritten and revised, and the matter re-arranged to correspond with the newer classification. The most notable changes are those that have already indicated the inclusion and description of the degenerations of evolution, the obsessions, the degenerations or phrenasthenias, under which he includes moral insanity and the criminal psychosis, which latter he seems to consider a degeneration, an instinctive phrenasthenia, but admits that in the present state of its study it appertains more to sociology than to psychiatry, in the stricter sense of the term.

The section of special pathology devoted to the secondary or associated

insanities, or the simple insanities associated with physiological or pathological conditions, is less extensively rewritten than the preceding one; still it has been considerably enlarged and occupies over thirty more pages than it did in the former edition. The additions are the insanities due to arthritism, diabetes, influenza and a few others, and considerable enlargement of the accounts of other forms. In the section on general paralysis the author calls attention to the diagnosis between it and the various pseudo-paralyses, including under this head the so-called spyhilitic pseudo-paralysis, the chief distinction between which and the general disorder is apparently in its curability by specific treatment. In speaking of the occasional causes of the disorder he recognizes the frequency of syphilis, estimating that, when sufficient care is taken in obtaining the facts, from seventy to ninety per cent of cases will be found to have had antecedent syphilis. His syphilitic pseudo-paresis seems to be, on the whole, only a provisional form, since the specific or non-specific origin of the genuine disorder is evidently considered by him as still an open question.

The treatment of insanity, as has been already stated, has been transferred in the present edition to the latter part of the book, and is supplemented with a list of formulas selected from various authorities. The chapters on "Medico-mental deontology," and on the criminal and civil relations of insanity have been but little altered, except in the omission of the models of medico-legal reports which occupied some forty pages in the previous edition. While these were of value as examples of analyses of cases and as showing the medico-legal practice in France, their omission here is not a serious injury to the volume. M. Régis expresses himself in favor of special hospitals for the criminally disposed insane, and presents a point in their favor that has been sometimes overlooked, that is, the liability of this class of patients to escape from hospitals of the ordinary construction and management, and the consequent need of special provisions for the protection of society.

Taking the work as a whole there is nothing that can be said except in commendation. The author has thoroughly and successfully revised his work, has suppressed superfluities and added a very large amount of valuable matter. He has the French aptitude for clear statement, and the style is admirably suited for a text-book. An English translation would be a desirable addition to our medical literature. H. M. B.

NOTES AND COMMENT.

DR. CARLOS F. MACDONALD has resigned his lectureship at the Albany Medical College. This action is due to a rule of the governing faculty of Bellevue Hospital Medical College, of which Dr. MacDonald was ignorant when he accepted the Albany appointment, that none of its professors shall hold chairs in two schools.

FREDERICK NEEDHAM, M. D., medical superintendent of Barnwood Hospital for Insane, Gloucester, has been offered and has accepted the post of Commissioner in Lunacy, rendered vacant by the appointment of Thomas Clifford Allbutt as Regius Professor of Medicine to the University of Cambridge.

THE CASE OF ALICE MITCHELL.—The case of Alice Mitchell, who was tried for murder in Tennessee, a few months since, has, in a medico-legal point of view, considerable suggestiveness. It is, so far as we are aware, the first instance of sexual perversion offered as a basis for the plea of irresponsibility for crime.

Of course, not having all the details of the evidence, we cannot say what additional facts were brought forth in support of the theory of degenerative psychosis, and do not, therefore, wish to impugn or criticise the verdict, based, as it appears to be, on the unanimous testimony of the experts. The principal fact, the sexual perversion, seems, in this case, to have been held to indicate insanity and with it legal incapacity to commit a crime or receive its punishment, and this by itself has certain bearings that justify such notice as we may give it here. It is not probable that the precedent made by the plea of the defense in this case will be altogether neglected in the future.

Hardly any alienist would deny that sexual perversion may be pathological and one of the symptoms of a degenerated and defective organization. This may possibly be the case when it appears to be the only aberrant phenomenon in the mental or moral constitution of the individual, but these instances must be rare, and the question of responsibility in such is an open one. Supposing, for example, if it is possible, a man perfectly

normal in intellect, will power, and ability to perceive moral distinctions, but having the sexual impulses of a woman, is there any ground whatever to assume his irresponsibility? Certainly not, according to the reasonable tests of knowledge of right and wrong, ability to control conduct, and lack of delusions perverting moral standards and causing the individual to conscientiously commit acts that are contrary to the general moral sense of the community. Abnormal sexual acts are the last of all performances to be thus condoned.

There is no normal appetite that is more easily perverted by vicious education or habits than is the sexual one, and save in very exceptional cases its abnormal manifestations may be credited to these. The restrictions necessarily placed by society upon its normal but illegitimate gratification have a tendency in the weak and viciously inclined to induce its perversions, or they are the last resource of sated debauchees who require abnormal stimuli for their gratification. Only in cases where there are plain indications of hereditary, congenital, senile, or other pathological degenerative conditions, do they necessarily entail irresponsibility.

In a civilization not controlled by Christian, or at least by stoical, morals, abnormal sexual tendencies and acts would perhaps not be considered criminal, but they would not carry with them irresponsibility for other crimes. In our higher civilization, with its more merciful tendencies and with the legal obtuseness that can see no gradations between perfect sanity and absolute irresponsibility, we may yet see the acknowledged commission of acts that are high crimes in our statute books successfully plead as evidence that the individual who committed them was incapable of any crime, was insane and irresponsible.

THE CARE AND CUSTODY OF INSANE CRIMINALS IN NEW YORK.—The State Commission in Lunacy has recently addressed to Judges of Courts of Record and District Attorneys in the State of New York, the following timely circular:

To Judges of Courts of Record and District Attorneys:

The old State Asylum for Insane Criminals, at Auburn, was, on April 25th, 1892, abandoned as an institution for the insane, and the inmates transferred to the new State Asylum for Insane Criminals, at Matteawan, near Fishkill-on-the-Hudson, N. Y. By an official opinion of the Hon. Simon W.

Rosendale, Attorney-General, the old State Asylum for Insane Criminals at Auburn, has legally ceased to exist, and the new State Asylum for Insane Criminals at Matteawan, N. Y., has in all things been substituted therefor; and that commitments to and transfers of inmates held on "criminal orders," from other institutions, can now legally be made to the latter, of the same force and effect as if made to the former institution.

The old institution, while conducted on the basis of a hospital for the care and curative treatment of the insane, was abandoned by reason of insufficient capacity, and also because of its remoteness from the centres of population from which its inmates were largely drawn.

The new State Asylum at Matteawan possesses as regards healthfulness and beauty of location, construction, equipment and management, all the essential features of a modern hospital for the insane which could properly be given to an institution of its class—it being designed for so-called unconvicted as well as for convicted insane. It has ample capacity for the accommodation and proper classification of the classes referred to, and is especially constructed with reference to the safe custody of dangerous inmates.

The institution now contains substantially all insane persons held under judgments of courts of criminal jurisdiction, and those held upon "criminal orders"—justices of the Supreme Court having recently transferred nearly all of the patients held upon such orders in the State hospitals to this institution.

In view of the fact that, as a rule, insane persons held under criminal orders are dangerous either to persons or property, the State Commission in Lunacy believes that it would be wise, unless the most urgent reasons exist to the contrary, that all insane persons who may become subjects of "criminal orders" should be sent directly to this institution instead of State hospitals for non-criminal insane under the discretion which the courts now possess. It is of opinion that such action would tend to the protection of life and property and to promote the comfort and welfare of other classes of insane

Observation has abundantly shown that, with rare exceptions, so-called unconvicted criminal lunatics, that is, persons charged with crime, but acquitted, or not tried, on the ground of insanity, are persons who have indulged in criminal practices prior to the onset of their insanity. These persons, as a rule, are not only socially objectionable to the inmates of ordinary hospitals for the insane, but are a source of constant anxiety to the officers thereof, owing to the great difficulty of retaining them in custody in institutions not designed for such persons. Furthermore, by sending them to the State Asylum for Insane Criminals, at Matteawan, in the first instance, subsequent transfers thereto, with the attendant expense and trouble, would be obviated.

All official communications should be addressed to Dr. H. E. Allison, Medical Superintendent, State Asylum for Insane Criminals, Fishkill-on-the-Hudson, this post-office being designated for the convenience of the asylum authorities.

ASYLUM PATHOLOGISTS.—W. Bevan Lewis, L.R.C.P., Lond., in his opening address to the section of Psychology of the British Medical Association, calls attention to some desirable extensions of asylum administration. The first of these is the need of more asylum pathologists. He suggests as the method of securing them that asylums send assistants to institutions where pathological work is well under way, for short periods of time, that they may become familiar with methods of pathological work. He shows the necessity of the harmonious work of the staff of assistant physicians with the pathologist, and of their making careful case records, that the results of examination may be of value. The establishment of clinical staffs is also favored, because of the good accruing to the older physicians as well as to the younger from the experience of teaching. Out-door patient departments have been established at Wakefield, and are found especially valuable in lessening the tendency to the total separation of the alienist from other medical men. We believe this experience is confirmed by that of the Pennsylvania Hospital for the Insane, which established a similar department several years ago. Out-door patient nursing, such as is carried on in many of the schools for nurses in general hospitals, as well as in those of hospitals for the insane, in this country, has been successfully tried by the West Riding Asylum and found of benefit to the nurses.

THE PAN-AMERICAN MEDICAL CONGRESS.—The preliminary "Announcement" of the Pan-American Medical Congress, just issued, should serve as a reminder to all whom it reaches, that the success of this great undertaking will depend upon the extent to which the Congress enlists the sympathy and coöperation of the entire profession of America. The JOURNAL OF INSANITY makes this the occasion, therefore, of calling attention to the heavy expense of organization, which must be met out of registration fees sent in advance of the meeting to the Treasurer, Dr. A. M. Owen, Evansville, Indiana. The Congress will be held at Washington, under the Presidency of Prof. Wm. Pepper, of Philadelphia, September 5th, 6th, 7th and 8th, 1893.

LUNACY AFFAIRS IN PENNSYLVANIA.—The condition of lunacy matters in Pennsylvania in 1891 is clearly set forth in

the Ninth Annual Report of the Committee on Lunacy of the Board of Public Charities, recently issued. During the year 1,431 patients were admitted to the State Hospitals; 1,235 were discharged, and at the close of the year, September 30th, 5,367 remained in custody. Of the new admissions, 623 were discharged cured or improved, 91 remained stationary, 521 died, and none were discharged not insane. In private hospitals there were 620 patients, in alms-houses 1,648, in the Eastern State Penitentiary 11, and in County jails 3. A condensed table of statistics for fifty years, based upon census returns, shows 8,476 insane persons in a population of 5,258,016 in 1890, as against 1,633 in a population of 1,724,033 in 1840. It is also estimated that the increase of insanity from 1840 to 1880 was one-sixteenth of one per cent, and in the decade ending 1890 there was a decrease of one-four-hundredth of one per cent. In 1890 there was one insane person in every 620 of the general population.

The notable event of the year was the enactment of a law for the establishment of an asylum for the chronic insane. This law received the approval of the Governor, June 22, 1891, and, in accordance with the provisions, a commission appointed to select a site, purchased a farm of 540 acres, known as the "South Mountain Site, on the south side of the Lebanon Valley Railroad, between the villages of Wernersville and Robesonia." The advantages of this location, and other reasons determining the action of the Commission, are reproduced in full, and constitute a valuable summary of the requirements for a site for an institution of this character.

Commenting upon their investigations of several cases of alleged abuse, the details of the more important of which have already appeared in the JOURNAL, the Committee urges improvement in the "present method of applying attendants and the manner of supervising the duties of those who daily tend the inmates." This is accomplished in part at the Norristown Hospital by the "inspectory system," which receives the qualified approval of the Committee until the services of a "better grade of attendants can be enlisted at sufficient compensation to ensure the safety of the patients and to protect the attendants from unjust complaint and from the results of their own necessary lapses of judgment." The prospective relief of the "encumbered State Hospitals" by the new asylum should afford an

opportunity for the application of the "hospital idea" in these institutions, and leaves ground for the hope, intimated by the Committee, that State and hospital authorities will adopt a persistent and aggressive policy admitting of no alternative for an adequately trained and properly compensated service, especially upon recent and curable cases.

The questions of early and voluntary admissions and furloughs of patients receive extensive consideration by the Committee. In the matter of voluntary admissions considerable progress has been made, although this method of securing treatment has not been popularized to the extent obtaining in Massachusetts, where Dr. Cowles reports forty voluntary of a total of ninety admissions to the McLean Asylum.

In addition to the usual descriptive, illustrated matter, pertaining to the various institutions of the State and statistical tables, the Committee appends to the report a deserved tribute to the memory of the late Dr. S. S. Schultz, with portrait, and the following entitled papers by alienist physicians: "On the Abuse of Hypnotics," by John B. Chapin, M.D.; "Insanity as a Symptom of Bright's Disease," by Alice Bennett, M.D., Ph. D.; "A Study of the Indications for, and Application of, Physical Culture in the Treatment of Insanity and Allied Diseases," by H. A. Tomlinson, M.D.; "Instruction of the Insane as Part of their Treatment," by Wm. H. Harrison, A.M., M.S., M.D.; and "The Insane in Some Remote Lands," by Henry M. Wetherill, M.D.

The report manifests the characteristic vigor and comprehensiveness of the work of the Committee, and is a valuable reflex of the condition of lunacy affairs in the State it represents.

STATE INSANE ASYLUM DISTRICTS IN NEW YORK.—At a meeting of the board for the establishment of State Insane Asylum Districts and other purposes, held Tuesday, October 11, 1892, in accordance with the provisions of Chapter 126 of the laws of 1890, the following division of the State was made and ordered to take effect January 1, 1893:

Utica State Hospital District—Counties of Fulton, Hamilton, Herkimer, Montgomery, Oneida, Saratoga, Schenectady and Warren, containing 935 insane patients.

Hudson River State Hospital District—Counties of Albany,

Columbia, Dutchess, Greene, Putnam, Queens, Richmond, Rensselaer, Suffolk, Washington and Westchester, containing 2,194 insane patients.

Middletown State Hospital District—Counties of Orange, Rockland, Sullivan and Ulster, containing 503 insane patients.

Buffalo State Hospital District—Counties of Cattaraugus, Chautauqua, Erie and Niagara, containing 982 insane patients.

Willard State Hospital District—Counties of Allegany, Cayuga, Chemung, Genesee, Livingston, Ontario, Orleans, Schuyler, Seneca, Steuben, Tompkins, Wayne, Wyoming and Yates, containing 1,090 insane patients.

Binghamton State Hospital District—Counties of Broome, Chenango, Cortland, Delaware, Madison, Otsego, Schoharie and Tioga, containing 609 insane patients.

St. Lawrence State Hospital District—Counties of Clinton, Essex, Franklin, Jefferson, Lewis, Onondaga, Oswego and St. Lawrence, containing 896 insane patients.

Rochester State Hospital District—County of Monroe, containing 425 insane patients.

The number of public insane patients in each of the above named districts, is given as it was on the first day of October, 1892.

THE SALE OF THE MCLEAN ASYLUM—The Boston and Lowell railroad corporation has bought the land and buildings of the McLean Insane Asylum at Somerville. A special meeting of the board of directors of the Boston and Maine railroad, which was attended also by the directors of the Boston and Lowell, was held September 28, at which the deal was consummated. The price paid is not given. It is understood to be $750,000, and some money has been paid to bind the bargain.

The asylum is owned by the Massachusetts General Hospital Corporation, and has been used for years as a private asylum for the insane. The estate consists of, besides the buildings, over a hundred acres of land, which is adjacent to the Boston and Lowell and Fitchburg and Grand Junction railroads. The Boston and Maine railroad, through the Boston and Lowell, has had its eye upon the property for some time.

The agreement provides that as long as the McLean Asylum shall occupy the estate the Massachusetts General Hospital Cor-

poration may, for a period not exceeding three years, retain the exclusive use of the buildings and portions of the land specified. The hospital corporation shall also have the right to remove the green-houses, shrubs, flowers, piping, boilers and cooking apparatus, and any other articles inside or outside the buildings that may be useful at the new asylum at Belmont. It is understood that no such articles are to be removed for the purpose of selling.

The new buildings are being erected on a picturesque estate of 170 acres at Waverly. The structures will be three in number, separated from one another by spaces of several hundred feet, and denominated respectively the Appleton, Belknap and Upham buildings. The two first named are designs of Fehmer and Page, the Boston architects so well known, and are well under way of construction. W. Y. Peters is the architect of the Upham building.

These three buildings will cost about $250,000, and $50,000 more will be expended on water supply, sewer system, preparation of grounds, etc., for the whole establishment. The Belknap and Appleton will be about 170 feet apart. The Upham building stands isolated 500 feet away from the site of the administration building. The buildings in construction are to be followed immediately by ten or more others, in the expectation of completing the transfer of the institution in a less time than the three years allowed by the terms of sale of the Somerville property.

An interesting feature of the Belknap building is an arrangement whereby the patients may be classified in small groups of two to five, with independent ingress and egress to the grounds. It will accommodate about thirty patients.

A French View of Scottish Home Care.—The Paris correspondent of the *Lancet* has recently given an account of the doings and findings of a commission appointed by the Paris Municipal Council, as the result of a study of the water question in Edinburgh and Glasgow. It appears that they took advantage of their stay in Scotland to enquire into the working of the system by which lunatics are treated at the un-asylum-like Royal Asylum of Glasgow, or as boarders in private families in the neighborhood of the Scottish capital. The commission vis-

ited several villages counting amongst their inhabitants the mentally defective of Edinburgh. They could not fail to notice the *bien-être* of these poor harmless creatures and their happy, if stupid, mien, so different from the discontented or, at least, resigned demeanor of the demented who crowd the close and malodorous Paris asylums. Last year the General Council of the Department of the Seine voted a trial of this home treatment of the harmless insane. The first essay will be made next spring. One hundred of the mentally affected will be distributed among the families of the Dun-sur-Auron, a commune of the Department of the Cher. The plan will subsequently be generalized, and it is hoped that private asylums will gradually disappear, to the great advantage of the insane of the city.

CHOLERA IN AN ASYLUM.—In the insane asylum of Bonneval, France, from the 17th of July (the first appearance of the epidemic) to the 29th, there were forty-one cases of cholera and twenty deaths. The disease was sudden in its attack, attended with faintness, nausea, colic, pains in the limbs, cramps, profuse and involuntary whitish dejection, then in the severer cases collapse and death, which in some instances resulted in a few hours of the first appearance of the symptoms. It was a curious fact that up to the date of our last information the epidemic was absolutely limited to the female side of the establishment, not a single male patient having been affected, notwithstanding the sanitary conditions were the same as far as could be discovered. Every possible precaution in the way of prophylaxis seems to have been taken, and at the last report, the disease appeared to be on the decrease.

MEDICO-PSYCHOLOGICAL TEACHING IN BRITAIN.—At a special meeting of the Medico-Psychological Association of Great Britain and Ireland, held at Bethlem Hospital on June 23d, 1892, it was resolved: "That this meeting recommends to the annual meeting that a board of education be appointed to consider all questions affecting medico-psychological teaching. The Board to consist of all members of the Association who are lecturers and teachers of psychological medicine in the universities or medical schools of the United Kingdom."

DEATH OF DR. PETER BRYCE.—To those of our readers who were aware of the serious nature of the illness of Dr. Peter Bryce, Superintendent of the Alabama Insane Hospital, Tuskaloosa, the news of his death on August 14th last occasioned little surprise. But the expectancy of a fatal issue in no way lessened the sorrow that was universally felt among his brethren in the profession when the end came. While all will deeply regret that Dr. Bryce was not spared to fill the high office to which, at the last meeting of our Association, he was elected, it is gratifying to know that the presidency, so worthily bestowed, came to the prospective incumbent in his dying days as an appreciated token of the esteem to which he was held by the American Medico-Psychological Association.

No attempt will be made at this time to do justice to Dr. Bryce's memory. The JOURNAL will publish an obituary, in a later number, together with a portrait of the deceased.

Dr. Bryce was born at Columbia, S. C., March 4th, 1834, and had been identified with the Alabama Insane Hospital since its organization in 1860.

CORRESPONDENCE.

SINGULAR EFFECT OF AN INJECTION OF MORPHIA.

MEDICAL LAKE, Wash., Sept. 20, 1892.

Editor of the American Journal of Insanity:

DEAR SIR—I had a case recently that to me seemed quite unusual. I have not seen anything reported with similar symptoms following at injection of morphia. Perhaps it is more common than I am aware of. If it is of any use to you use it; if not I will refer it and you to your waste basket.

The patient is a well known public speaker of large and powful frame. About six months ago he suffered from what was said to be appendicitis, and since that time has taken from one to three hypodermic injections of morphine daily. He claims he has never taken more than one-fourth and usually but one-sixth grain at a dose. This last statement I doubt very seriously.

The patient was about to take part in a public debate, and during the preceding day took three injections to steady himself, the last one late in the afternoon. When this last injection was administered he noticed the fluid did not raise a lump as usual, and when the needle was withdrawn two or three drops of dark blood oozed out. This would indicate that a vein was punctured. Immediately sharp shooting pains were felt through the head and neck. They were not confined to any one part, but would dart from one place to another, and were excruciating in character. He started to rise, but found himself very dizzy and his head seemed on fire. He called for assistance. A physician was sent for who administered a seidlitz powder and advised rest. Patient continued to get more restless and alarmed, suffered greatly from pain and thought he was about to die. I was then sent for and found him extremely restless and apprehensive, pulse 98 and weak, respiration 12, intermittent and shallow, temperature 102.6° F., pupils contracted, face flushed, head warm, feet cold, tongue and fingers very tremulous. Atropine was administered hypodermically for its effect on respiration, and sulfonal given by mouth. In about an hour patient fell asleep and slept until morning. At 6 A. M. he awoke feeling rested and

free from pain, pulse 86, temperature 100.2° F., respiration 18. Took a light breakfast. At noon temperature, pulse and respiration normal; no pain or uneasiness; able to be up and about the house.

The patient is a very intelligent man and understands fully what the possible consequences might be of injecting polluted water or air into the tissues. Says he has always been exceedingly careful, and never has had an abcess or inflammation as a result of injections. Is positive the water in this case was perfectly clean, that no air was injected, and that he was in his usual good health up to the minute he made the last injection.

What caused the dizziness, the almost unendurable darting pains, and the intense burning sensations in head and neck and nowhere else? And, what puzzles me more, what caused the temperature suddenly to rise 4° F.? I have several times known of morphine and hyoscine dissolved in pure water to be accidentally thrown into the circulation, but without more serious result than an increase in the intensity and rapidity of the action of the drug. This case is a novel one to me.

Yours very truly,

JOHN M. SEMPLE.

THE BURNING OF THE JACKSON ASYLUM.

MERIDIAN, September 15, 1892.

Editor of the American Journal of Insanity:

DEAR SIR—In your last Half Yearly Summary I find a notice of the burning of the State asylum at Jackson, and with your permission I desire to give a more extended notice of the fire. The fire originated in the attic where refractory patients slept, and it is presumed that an escaped patient, who had just been returned and placed in the attic for safe keeping, set fire to his bedding with matches. When first discovered the fire was confined to his room and had not made much progress. A still alarm was given and a line of hose was promptly stretched by the local fire brigade, and all expected to extinguish the flames in a few minutes, but unfortunately the city water works failed to give sufficient pressure to throw a stream of water on the fire, and as the asylum was wholly dependent upon the city water works for water the local company could do nothing. Engines were then ordered from the city, and after a costly delay they arrived, and by using the reservoir were able to throw water on the fire, and finally succeeded in checking its progress, but not until the whole male side (six wards), the administration building, and one wing (three wards) on the female side were totally destroyed and another female wing badly damaged.

During the progress of the fire, which lasted from 5 A. M. until 10, all of the patients were transferred to the new asylum for the colored, which fortunately had just been completed, and all of the wards were not occupied. One male patient, the incendiary, was burned, and four or five men made their escape, which is a good showing for the administration under such exciting circumstances. Sixty-five patients were transferred to the East Mississippi asylum, the damaged wards were immediately put in order, and as the kitchen and laundry were not burned, all were soon made comfortable, although they were somewhat crowded.

The legislature was in session at the time, and the day after the fire made an appropriation of $25,000 to meet the immediate wants. Later on an appropriation of $80,000 was made to rebuild the asylum. Work on the building is progressing rapidly, and by the end of the year it will be completed.

It was very unfortunate for the insane of this State that this fire occurred just when it did. Both asylums were asking for larger appropriations for support and for extensions in buildings, but after the fire our Solons thought they could not do more than rebuild the State asylum and give us a bare living. Mississippi, like most other States, has not been able to care for all the insane in the State, but when the asylum at Jackson is finished we shall have accommodation for all, and while our per capita allowance will not be as large as it should be, yet we shall be able to make them comfortable. The building of a separate asylum for the colored insane was an improvement in the right direction, and the removal of the negroes from the other asylums leaves enough room at present for all the white insane.

While the burning of the asylum at Jackson has retarded us for a year or more, yet it has already borne some good results in the matter of better protection against fires. At the East Mississippi Insane Asylum, iron stairs leading to each ward have been put up on the outside; a line of hose sufficient to reach any part of the building has been put on each floor, and in the basement two large Babcock fire extinguishers have been placed in the centre of the building, and a small one in each attendant's room. Notwithstanding the fact that we still use lamps in lighting the building, yet with our protection we feel safe.

We have reason to believe that other improvements will follow, and we hope to replace coal oil lamps with electric lights in the near future.

Very truly,

J. M. BUCHANAN.

OBITUARY.

JOSEPH DRAPER, M. D. *[1]

Dr. Joseph Draper, superintendent of the Vermont Asylum, died March 17, 1892. He was confined to his room only five days with an attack of the "grippe." His general health had always been good, and he was rarely ill save for a day; consequently little anxiety was felt concerning the issue of the disease until a short time before his death. Dr. Draper was born in Warwick, Mass., February 11, 1834. He was of New England ancestry, both father and mother being natives of Massachusetts. His early education was obtained in the common schools and in the academies at Brattleboro, Vt., and Deerfield, Mass. After he entered upon the study of medicine, he attended lectures at one of the medical schools in New York and also at the Jefferson Medical College, Philadelphia, where he graduated in 1858. After a considerable period in general practice, he became an assistant of Dr. Rockwell in the Vermont Asylum, where he remained until January, 1865.

He left this position for one of an assistant surgeon in the United States General Hospital at Brattleboro, in which he remained a few months, and in May became an assistant in the State Asylum at Worcester, Mass. He was also acting superintendent of that institution for one year. In 1870 he became an assistant to Dr. Buttolph in the State Asylum at Trenton, New Jersey, where he remained until February, 1873, when he was appointed superintendent of the Vermont Asylum, where he remained until his death.

It thus appears that the first half of his professional life was little more than a preparation for the important position he occupied during the last half of it. Little is known to the writer of the history and method of study pursued by Dr. Draper during this time. He rarely referred to them himself in conversation. The lessons which he received in the general management of the affairs of the institution from Dr. Rockwell were such

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* For portrait see frontispiece.

1 Read at the meeting of the American Medico-Psychological Association held at Washington, D. C., May 3-6, 1892.

that he always referred to him, when occasion required, in terms of the highest respect.

After Dr. Draper was appointed as superintendent, he devoted himself to the conduct of the asylum with a singleness of purpose rarely excelled by any of his associates in the country. His first and last thought related to its improvement, and provision for the best treatment of those who sought its care. The changes which he made related not only to the internal sanitary arrangements, the better lighting and adornment of the halls and rooms, but also to a thorough system of clinical study and treatment of cases. The thoroughness with which this was carried out has been evidenced by the papers which he has read on several occasions before this Association, the New England Psychological Society, and the Vermont Medical Society. His theory in reference to the number of patients in an institution was that it should not be so large that the superintendent could not have the general oversight of each case, and study it clinically. Any other system of professional conduct in relation to cases, in his opinion, inevitably led, sooner or later, to routine, and ultimately to semi-indifference on the part of the staff. While system rigidly adhered to may become stereotyped, yet lack of it is always attended with more serious results, and, indeed, is fatal to professional growth and study. It thus came to pass with Dr. Draper that he was enthusiastic in all that related to the moral and medical management of his patients. No efforts were too great and no expenditures too costly in his view if they conduced towards securing the grand result to be sought for in all curable cases, viz.: recovery. In all the spheres of his official duties he exhibited great fidelity, soundness of judgment and an elevated character which secured for him the entire confidence of his board of directors, as well as the highest respect and esteem of all with whom he was in any way associated.

No institution in this country or any other, so far as I know, has so many acres of land as the Vermont Asylum. These acres cover parts of two highlands, or possibly they may be called mountains. After Dr. Draper visited Scotland and Switzerland, he conceived the idea of converting the highland nearest the institution into a park for his patients. He entered with his usual enthusiasm on the work, and covered the park with walks and roads leading to the top, from which one of the most charm-

ing views can be had of the Connecticut river valley for several miles to the north and south. He then began the erection of a stone tower, to which, during each summer, he added several feet, the work being done chiefly by his patients under the direction of a practical mason and engineer. It now stands incomplete, though lacking only its crown. So far as I know, no institution has a more delightful park for its patients or so unique and beautiful a structure of stone to adorn it. This was all secured with comparatively little expense and stands a fitting monument to the memory of Dr. Draper.

Near this mountain park Dr. Draper secured two large farm houses which he fitted up for summer homes for such of his patients as could be placed in them for limited periods with safety and advantage to themselves. It was thought that if change from home for short periods is beneficial for sane people, much more so must it be for certain classes of insane whose only home is an asylum. These houses command extensive views of meadow land and distant mountains, and are arranged as nearly as possible like ordinary homes. They were the first of the kind connected with hospitals in this country, and Dr. Draper is entitled to much credit for his move in this direction.

Dr. Draper endeared himself not only to those immediately associated with him in his asylum work, but also to the community in which he lived as few other superintendents of asylums have ever been able to do. He thoroughly identified himself with its growth and interests. He was the prime mover in establishing a society whose main object was beautifying the village which lies on the banks of the Connecticut nestled close between the mountains. These mountains he loved not only to look upon, but to ascend and look from. His delight in enjoying such an experience I once had occasion to participate in, and he then confided to me his hope that some time in the future the mountain on which we stood would be crowned with a tower. Afterwards he wrote a paper with the purpose of developing the interest of the people in this undertaking, and as indicating something of the character and poetry in the man. I shall read a short extract from it: "It is time substantial artificial work were done to supplement some of the rugged points up and down this New England valley which were raised in the rough by mother nature ages ago, and which may one day become classic

like those of the Hudson and the Rhine. No better point is afforded on which to rear a first monument than this mountain which stands above us and looks down upon us. Let us carry up to its most prominent height no flimsy or foreign materials, but rather gather up those fragments and simply pile them higher. Nothing but stone would be in keeping with either the character of the mountain or that of our people.

I am much in earnest upon this point. There is much in our northern scenery to remind the traveler of Scotland. This eastern view of ours suggests Salisbury Crags, Arthur's Seat overlooking old Edinburgh; and whoever has visited the Trossachs and gazed upon Ben Lomond sees, in its rocky pinnacle shooting above the summit like a colossal citadel rough made and rudely fashioned by the great architect, something which puts out of mind anything less solid and enduring in the finishing of nature's work than the imperishable stone. Then let us imitate, in the crowning of our mountain top, those hints of the great architect in the work of our hands, and as we set about it 'look up and not down, look forward and not back, look out and not in, and lend a hand.'"

These words of Dr. Draper exhibit better than any I can use some of his mental characteristics. He loved to live and labor among the rugged mountains; to behold their constantly changing shadows and breathe the air covering them. His chief recreation during the summer months was riding, after the work of each pleasant day, among them, and along the banks of the many streams which flow into the Connecticut river in that vicinity and over the intervening highlands.

His friendships were strong and enduring. He hated sham in every way. His face and physique indicated how strong in purpose, how inflexible in resolution he was. When once he had arrived at a conclusion, only the clearest evidence that he was in the wrong deterred him from going forward. His desire to build in stone was, therefore, only a true expression of his character.

That was true of Dr. Draper, which is equally so of some other persons, viz.: that one needed to know him well to be able to form a just estimate of his character. This required time. His modesty was so great that it overshadowed and partially obscured some of the other excellences of his mind. But to

those whom he knew well he was a most genial and delightful companion. He thoroughly appreciated the good qualities of his confrères, and rarely referred to any others which might exist. He was quite well read in English history, and also in the literature of his specialty, and he was ever ready to refer to apt illustrations of the subjects of conversation. He greatly enjoyed a good story and had a keen appreciation of eccentricities of character. He was well versed in the folk-lore of the valley of Connecticut, and often quoted some of the quaint sayings and forms of speech which were common in the last century. He delighted in the study of family histories, and he was able to track from two or three generations back in a sort of graduated scale the deterioration of mind, from what he termed oddities and eccentricities, on and down to the development of insanity. His thought was that many families ultimately became stranded like drift-wood on the shores of rivers, and are eliminated from society, while their places are filled by those in whose veins more vigorous blood circulates. As confirming the correctness of his theory, he could refer to the histories not only of families which he had known, but also to those of several of the royal and other distinguished families of Europe. What was true of families was equally true of nations. The great forces of evolution and disintegration are ever moving onward and covering the earth with the dust of fallen peoples. Nations have been born, passed on into maturity, deteriorated and perished. As the hulks of stranded ships are sometimes found on the shores of the Northern Ocean, which indicate how thickly they were once populated by tribes and peoples of whose history we know little or nothing; so the broken fragments of stone with partial inscriptions which are sometimes found in now desolate and forsaken regions of the earth, indicate the decline, disease, and death of nations for which the earth had no longer any use or need.

Dr. Draper was in closest touch and sympathy with everything that concerned psychiatry and psychology, and was very jealous of the reputation of our hospitals and asylums. Though he rarely took part in the discussions of the American Psychological Association, yet no member gave keener attention to them or had more pronounced views on the subjects under consideration. His loyalty and devotion to all that he thought tended in any degree to advance the interests of our Association

were deeply engraved upon his heart. His sympathies were quick and large and went out freely to all who came in his way needing them, so that during his long residence in Vermont his name became a household word, and familiar to a large portion of the people by whom he was held in the highest esteem. Indeed I can crave no greater boon for his successor than that the mantle of our associate, and his instructor, may fall on his shoulders.

Dr. Draper was a diligent student, and yearly prepared papers which he read before medical societies. He is also the author of a history of the Vermont Asylum, covering its first fifty years. At the time of his death he was President of the New England Psychological Society. He had also been President of the Vermont Medical Society.

H. P. STEARNS.

RICHARD GUNDRY, M. D.*

Richard Gundry, M. D., was born at Hampstead, a little village in the vicinity of London, England, October 14th, 1830. His father, Rev. Jonathan Gundry, was a Baptist clergyman, who early imbued his son with a love of learning and was able to send him to a private school in the neighborhood, where he gained his first knowledge of the classics. At the age of fifteen he came with his parents to Simcoe, Canada, where after a brief period of study in a Latin school he was thrown largely upon his own resources. He obtained the means for pursuing his professional education by writing in the office of an attorney. He began the study of medicine under Dr. Coverton, Toronto, and graduated in 1851 at Harvard Medical School. At Harvard he had the advantage of instruction from and personal contact with such men as Oliver Wendell Holmes, Jacob Bigelow, John Ward and James B. Jackson. He took an excellent stand in his class and graduated with honor. He settled in Rochester, N. Y., but before he had been long engaged in practice, he was able by a fortunate legacy to realize his desire to travel abroad. Returning in 1853, he settled in Rochester, N. Y., again, but during the year, in company with Dr. E. M. Moore, an eminent surgeon of Western New York, removed to Columbus, Ohio, where soon after he was appointed demonstrator of anatomy in Starling Medical College. In 1855 he received a provisional appointment as second assistant physician in the Central Insane Asylum at Columbus, one of the earliest institutions established in Ohio for the treatment of the insane, to fill a temporary vacancy caused by the absence of one of the physicians who had gone to the Crimea. His fitness for the work was so apparent, the temporary appointment soon became a permanent one. From 1855 to 1857 he was one of the associate editors of the *Ohio Medical and Surgical Journal*. In 1857 he was transferred to the Southern Ohio Asylum at Dayton as assistant physician, of which asylum he became medical superintendent in 1861. This position he filled with signal ability until 1872, when he was transferred to the Southeastern Asylum at Athens, Ohio, then in process of

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erection, to complete and prepare the buildings for occupation. Subsequently, on the completion of the asylum in 1874, he was appointed its first medical superintendent, and retained the position until 1877, when he was transferred to Columbus, Ohio, to complete and make ready for occupation the very extensive buildings of that asylum. This position he held until May, 1878, when the exigencies of practical politics forced his resignation. The asylum was "reorganized," in consequence of a vicious custom which still exists in Ohio, to the end that its medical officers may be of the same political faith as the dominant party in the State.

After twenty-three years of most faithful, devoted and self-sacrificing service to the insane of Ohio, in three of the asylums, he was forced to resign because his political affinities did not correspond with those of the newly elected governor. To a sensitive, high-minded physician like Dr. Gundry the blow was a severe one, and he felt the injustice of this treatment to the day of his death. He was immediately appointed medical superintendent of the Maryland Hospital for the Insane at Catonsville, and held the position until he died. In the opinion of his friends, his change of residence to Maryland was most fortunate. He was thrown at once into a circle of high-minded, cultured and appreciative men, with whom his relations were most pleasant, and under the genial influences of whose companionship his mind was stimulated to new and fruitful effort. In 1880 he received the appointment of professor of mental and nervous diseases in the College of Physicians and Surgeons of Baltimore, and in the following year, upon the sudden death of Professor Howard, was appointed professor of materia medica in the same college, and there lectured with great acceptance during the remainder of his life. In January, 1890, he suffered severely from influenza, and for a time was very seriously ill; but he subsequently rallied and apparently gained his usual health. It was, however, evident that his vigor had been seriously impaired by this illness, and during the last year of his life he seemed to have lost the buoyancy and elasticity which had previously characterized him. Although he lectured as usual, his duties cost him much effort. In March, 1891, the trustees of the Maryland Hospital perceiving his condition, voted to give him a long leave of absence, with the hope that his health would be restored.

He went to Atlantic City and for a time seemed to improve. Subsequently, however, symptoms of Bright's disease developed, and it was evident that his days were numbered. In accordance with his earnest desire he was brought home, where, four days later, he passed away, surrounded by his family and devoted friends.

Dr. Gundry's career as a chief medical officer of an institution for the insane was most successful. He possessed a rare executive ability and the happy faculty of judging men and their fitness for the proper discharge of duty. It is interesting to note that many able men grew up about him in the various asylums and hospitals with which he was connected, who, under the stimulus of his presence, developed a great degree of efficiency and usefulness. He was eminently helpful to young men; was ready to recognize their talents and took great pleasure in their advancement. He wholly discarded the system of mechanical restraint in the treatment of the insane while in Athens, and during his whole after life was a consistent and fearless advocate of greater personal freedom for the unfortunate victims of mental disease. He had an intuitive appreciation of the mental processes of those who suffered from insanity, and was fertile in expedients for relieving their distress or for adding to their comfort. The literature of alienism was familiar to him, and his speeches and writings upon all matters touching insanity showed an intimate knowledge of the work which others had done. He was also an expert in asylum construction, and the asylums at Dayton, Athens and Columbus were in turn built by him. He took much interest also in landscape gardening, and was never so happy as when directing the planting of trees or the decoration of a lawn. It was a pleasure to visit the wards of his hospital with him. His genial presence and ready flow of wit, his quick sympathy with his patients, his ability to impress the most irritable or wayward with a conviction of his genuine interest in them—all tended to make his daily round of duty a delightful one.

He was an omnivorous reader—a ready writer—a clear and pleasant speaker, with rare gifts of expression and vast stores of knowledge at instant command. His memory of names, dates, facts, incidents and of verbal quotations, was phenomenal.

Some of Dr. Gundry's feats of memory were remarkable. The

writer has known him to repeat from memory the names and dates of birth and death of the Lord Chancellors of England; also the names and dates of birth and death of the signers of the Declaration of Independence.

He had great intellectual grasp, and in debate could marshal his forces most effectually. The writer often heard him in public discussions, where he measured swords with the keenest and brightest of his associates in scientific or philanthropic work, and never without the conviction that few men were able to wield so many weapons in their own defense, or had such wealth of ammunition. He also wrote with equal facility, and the list of titles of his articles and addresses is a long one. It is to be regretted that no full record of them seems attainable. Among the number were "Observations upon Puerperal Insanity," 1860; "The Psychical Manifestations of Disease," 1881; "The Care of the Insane," 1881; "Separate Institutions for Certain Classes of the Insane," 1881; "The Regulations of the Powers of the State to the Rights of the Individual in Matters Concerning Public Health," 1883; "Valedictory Address to the Graduating Class, College of Physicians and Surgeons," 1883; "Some Problems of Mental Action," 1888; "The Care of the Insane," 1890.

He was a born letter writer, and his letters sparkled with wit, historical allusions and apt quotations. At the risk of proving tedious, I have taken the liberty of making extracts from one which I received many years ago, which will well illustrate his facility in writing.

He says: "I began a letter to you long ago on the subject of 'Imperative Conceptions,' but was interrupted before I finished it and it lay between the leaves of my blotter for a more convenient season, until a few days ago, when it disappeared in my absence, of which my wife availed herself to put things to right and burn up the rubbish. So I fancy the letter was purged with fire, perhaps for your benefit, as I *more vulgo* went for Krafft-Ebing, who, in the matter of 'Imperative Conceptions,' not only nodded but went to sleep and snored.
like your definition of imperative conceptions, except that you leave it open to the objection that 'impels to actions,' etc., might be made to include 'impulses.' Now as imperative conceptions dominate the mind, absorb the thought, annoy the

individual, who restrains the motor impulse, (except that of speaking perhaps), I would say instead of 'impels to actions,' suggests actions, etc. When it impels to actions it has passed from an imperative conception to an 'imperative impulse.' An imperative conception like hypochondriacal fancies comes as Lamb sings:

> 'Crowding my privacy
> They come unbidden,
> Like foes at a wedding
> Thrusting their faces
> In better men's places,
> Causing confusions,
> Figments heretical,
> Scruples fantastical,
> Doubts diabolical.'

One of the best illustrations that I can call to mind occurring in a man of fine intellect depressed by grief and out of health, but not insane, I find in an incident of Washington Allston's life. Leslie reports: 'When Allston was suffering extreme depression of spirits immediately after the death of his wife, he was haunted during sleepless nights by horrid thoughts and he told me that diabolical imprecations forced themselves into his mind.' The distress to a man so sincerely religious as Allston may be imagined. He wished to consult Coleridge, but could not summon resolution. Leslie therefore consulted Coleridge for him. Coleridge said: 'Allston should say to himself, 'Nothing is me but my will. These thoughts, therefore, that force themselves on my mind are no part of me, and there can be no guilt in them.' If he will make a strong effort to become indifferent to their recurrence, they will either cease or cease to bother him.' He said much more, but this was the substance. It seems to have been effectual. I have always supposed Bunyan's blasphemous thoughts, etc., were of similar origin, though it is true they had a relation (by apposition) to the train of thought occupying his mind. Still remembering Bunyan's imaginative powers, I am inclined to believe that their apparent coherence is as much due to his description of them, and his after-belief that they were part of the diabolical art, to keep him from the true path of duty. He resisted them and they disappeared. They occurred spontaneously while he was praying and preaching, and they lacked some of the

elements of delusion—only remembering them in trying to account for them, he creates the delusion or rather false belief.

I had members of three generations of one family, at different times, under my care—grandmother, mother and son. A brother of the latter, a bright boy, ambitious, truthful, was brought to me to see if he was putting on airs, or had any disease of throat or brain. While the father was talking to me the boy had a spasmodic clutching of the throat, and ejaculated the most vulgar word in the English language. I drove him out, when the father explained that in every other respect he was a good boy, never swore or used vulgar words in conversation; but in company, at dinner, when listening intently, or when studying his lesson alone, absorbed in his task, his throat would give a gulp and some vile word would be belched out as if unconsciously, as one would say 'Pshaw!' Sometimes the word would be plainly heard, sometimes indistinct. Years after I was attending court as a witness in a country town, when suddenly the same vulgar word was ejaculated. Some disturbance occurred for a moment, but business was resumed. After a while another similar outburst. This time I traced it to the reporter's desk. Several times the same thing occurred during the morning—the man was writing his notes to all appearance, unconscious of everything but his desk, when suddenly, like the strange voices of an Irvingite prophet in a meeting, would ring out a dirty, sometimes a profane word—never more than one. Upon enquiry I found it was the same person about whom I had been consulted. Everybody said he was a very respectable man, had prospered, was connected with some paper, but occasionally the trouble occurred. That morning he was troubled more than usual. He said he was conscious of some absurd thought coming into his mind, but not of speaking until he had spoken—that sometimes he was sure he did not speak when the thoughts occurred to him. Probably seeing me after so long revived the mental status, whatever it was, upon which the 'imperative conception' depended. I concur with you in the conjecture that disjointed utterances in mania, etc., are probably 'imperative conceptions.' I except speaking from being disconnected from conception, because as many persons cannot read except they pronounce the words they see, sometimes even aloud, so the same order of mind will interpret strange thoughts

by spoken words and have no thought impressed upon them without words. The imperative conception, therefore, in them being objective to them, is interrupted by speech only. Perhaps this is not very clear, but you will catch the meaning I wish to convey. * * * * * * * *

In your cases of 'paranoia' do you meet any arising where there is no hereditary taint? Is it not the form developed in a brain previously unstable from hereditary influences or traumatic causes? I am inclined to think the latter influence greater than is supposed. Injury to head in early life may result in nothing, but it often lays the foundation of instability upon which long afterwards is built the superstructure of insanity, often of this kind. Possibly want of nourishment in childhood may have the same ulterior consequences. Have you any instances of transformation from the persecuted to the persecutor? * * * * * * *

Do you observe many of the crystallized delusions of chronic mania? Many, formerly so regarded, are now known to be transformations of delusions of persecution, the result of 'paranoia,' but there is a 'remnant' which, as mania subsides, gradually rises above the receding flood and remains as a shocking monument of its destructive and constructive force. One, I well remember, who had a well-marked attack of mania, with the usual mobility of ideas and changing delusions as he became calmer, was able to work regularly, but gradually evolved a delusion that he had been in a pre-existent state—an unlearned man, yet he spoke as if he had undergone metempsychosis. As he worked in the carpenter shop he used to tell tales of what he had seen, not always how he had seen them; but as I chatted with him he frequently referred to the time when we played together in a hollow oak tree at Widow———'s place. When I asked him how that could be when he was twenty years older than I, he answered—'Why, you know; it was long ago when we were squirrels!' He had passed through several such transformations with others; we had been other animals playing together. The only time I had trouble with him was when he threatened and would have assaulted the butcher, who was killing a hog, which he claimed to be his brother. He had at long intervals exacerbations of maniacal excitement of a mild type, but the delusion of his pre-existence was permanent and

evidently made out for the recollection of his various delusions while maniacal. Like Disraeli's lady he evidently thought, 'We have been fishes, we shall be crows!' He was an ignorant man, but of large brain and strong imagination. Among other peculiarities he feared witches, and hated doctors; claimed they had brought harm to him in his pre-existent state, yet he liked me on account of our long acquaintance; and except the outbreak against the butcher, I never saw him try to harm anybody. Poor fellow, he has long gone to his home where witches will not bother him, and few doctors will be within call to annoy."

I wish that time would permit me to give other similar extracts, but this seems impossible.

Dr. Gundry was married in 1858 to Miss Martha M. Fitzharris of Dayton, Ohio, who, with eight children—four sons and four daughters—survives him. His domestic life was eminently happy. Kind, affectionate, interested in his children and proud of their development, he watched over them with more than a father's care, and was rewarded in return by a love and devotion on their part rarely seen. His children were his companions in travel, in study and in recreation.

His attitude of mind toward religious matters was a reverent one. He was a Unitarian in his religious belief and affiliations. He was full of charity toward all, and was singularly tolerant of the rights and feelings of those with whom he differed.

In private life he was seen at his best. His rich stores of knowledge were poured forth freely in conversation, and he was equally at home in all fields. Without neglecting his scientific work, he was a devoted student of history and of English literature. Pure in life, an enthusiast in his chosen work, an able physician, a profound scholar, an affectionate husband, a devoted father, a steadfast friend—such was his character.

H. M. HURD.

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P. Bryce